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Supreme Court of the United States

OCTOBER TERM, 1975.

No. 75-1744

E-T INDUSTRIES, INC.,

Petitioner,

vs.

WHITTAKER CORP. AND DES PLAINES GRAND AUTOMOTIVE SPEED CENTER, INC.,

Respondents.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SEVENTH CIRCUIT.

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PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SEVENTH CIRCUIT.

PETITION FOR WRIT OF CERTIORARI.

Petitioner respectfully prays that a Writ of Certiorari be granted to review the Judgment and Opinion of the United States Court of Appeals for the Seventh Circuit entered on September 23, 1975, petition for rehearing denied March 4, 1976 in Appeal No. 74-1924 entitled *E-T Industries, Inc.* v. *Whittaker Corporation and Des Plaines Grand Automotive Speed Center, Inc.*

OPINIONS BELOW.

The opinion of the Court of Appeals reprinted in the Appendix at App. 1 through App. 8 is officially reported at 523 F. 2d 636 (7th Cir. 1975). The opinion and order of

the United States District Court for the Northern District of Illinois, Eastern Division, dated October 31, 1974, reprinted in the Appendix at App. 9 through App. 17, is unofficially reported at 183 U. S. P. Q. 690 (N. D. Ill. 1974).[1]

JURISDICTION.

The decision of the United States Court of Appeals for the Seventh Circuit reversing the Trial Court was entered on September 25, 1975 and the Petition for Rehearing *en banc* was denied on March 4, 1976. The Order denying the Petition for Rehearing is reprinted at App. 18.

The jurisdiction of this Court is invoked under 28 U. S. C. Sections 1254(1), 2101(c) and 2101(e).

QUESTIONS PRESENTED.

1. Whether the conflict of decisions that exists among the Circuits as to the standard of Appellate review to be applied in judging *Graham* findings dealing with the issue of non-obviousness should be resolved?

2. Whether the decision of the Appeals Court in reversing the Trial Court is in conflict with the recent pronouncements of this Court that interpret 35 U. S. C. Section 103?

3. Whether in reversing the Trial Court, the Appeals Court erroneously distinguished the case at bar from this Court's pronouncement in *United States* v. *Adams*?

STATUTES INVOLVED.

Title 35 U. S. C. Section 103, which requires consideration in reviewing this Petition states that:

> "A patent may not be obtained though the invention is not identically disclosed or described as set forth in Section 102 of this Title if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains."

1. Hereinafter, references to the Appendix are designated as "App." with a page number.

STATEMENT OF FACTS.

This action was commenced on October 29, 1969 with the filing of a complaint in which the petitioner herein, as plaintiff, sought an injunction and damages arising from defendants' infringement of United States Letters Patent No. 3,329,468 issued on July 4, 1967 to Richard D. Beith.[2] Defendants by their answer denied infringement and raised the affirmative defense of invalidity. Trial was held in April of 1974 wherein there were numerous witnesses for both sides, documents and physical exhibits and extensive post-trial briefs. On October 31, 1974 the District Court handed down its opinion holding that the *Beith* patent was both valid and infringed (App. 9-17).

Defendants appealed from the Trial Court's Decision to the Appeals Court for the Seventh Circuit and on September 23, 1975 that Court reversed the Trial Court's Judgment on the ground that the subject matter of the *Beith* patent was obvious and therefore the patent was invalid under 35 U. S. C. Section 103 (App. 1-8). Plaintiff then sought a rehearing *en banc*. The Court of Appeals denied the request for rehearing in an order dated March 11, 1976 (App. 18).

This Petition for a Writ of Certiorari seeks review of the Appeals Court's errors of law, as well as clarification of the conflict that exists among the Circuits concerning the issue of non-obviousness.

E-T Industries, Inc. (hereinafter called "Plaintiff" or "E-T") is a California corporation having its principal place of business

2. The patent is reproduced in the Supplemental Appendix at App. 24-29 and is hereinafter sometimes referred to as the *Beith* patent.

in California. It is now a division of F. D. I. Inc., an automotive after-market manufacturer. Originally, the action was brought against Ansen Automotive Engineering, a wholly-owned subsidiary of Whittaker Corporation. Sometime after commencement of the litigation, Ansen was merged into Whittaker as a division. After trial, Whittaker Corporation was substituted as a defendant for Ansen. The other defendant, Des Plaines Grand Automotive Speed Center, Inc., is an Illinois corporation having its principal place of business in Illinois (hereinafter Whittaker and its distributor, Grand, will be referred to as "Ansen" or "defendants").

As the *Beith* patent (App. 19-24) sets forth, wheels are commonly secured to automobiles by means of a plurality of bolts or lugs projecting from a brake drum or axle flange, and cooperating lug nuts. There has been no standardization of the arrangement of such wheel lugs among different auto makers. The patent states that a main objective of the invention is to provide a wheel that is both decorative and universal. The wheel incorporates means for mounting it on brake drums having lug bolts arranged in bolt circles of the three most popular diameters for automobiles, *i.e.*, 4½ inches, 4¾ inches and 5 inches.

The specification sets forth several specific embodiments of the invention wherein a plurality of elongated rabbeted lug apertures are formed in the wheel. Adapters are used to positively index the wheel on the lug bolts as well as to clamp the wheel to the brake drum. The adapters are utilized in cooperation with the lug apertures and rabbeted seats of the wheel for selecting a desired one of three lug bolt circle patterns. The patent also teaches the concept of obtaining three different lug bolt patterns by reorienting adapters which have off-center holes formed therein to obtain two lug bolt diameters (4½ in. and 5 in.) and by utilizing adapters with centered holes in place of the adapters with off-center holes to obtain the middle diameter of 4¾ in.

Prior to the *Beith* invention, the industry had failed to provide an acceptable system that would eliminate the necessity of providing a different wheel for each lug bolt circle. One unsuccessful solution proposed and used in the past featured a massive adapter plate providing circularly spaced pre-drilled apertures to fit on lug bolts of a specified lug bolt circle diameter, as well as lug bolts arranged in a circle of another standard diameter, such as 5½ in. This required the manufacturer to stock wheels having apertures suited for fitting onto lug bolts arranged in a circle of 5½ in. diameter. Rather than stocking three sizes of wheels, three sizes of adapter plates were stocked. Defendant Ansen chose this unsuccessful solution for adapting its wheels to the three different bolt circle diameters. Subsequently, Ansen abandoned the adapter plate device and deliberately infringed the *Beith* patent. Another unsuccessful attempt at a universal wheel is the *Adair* patent, No. 2,590,363, cited and considered by the Patent Office which taught an emergency wheel for temporary use with elongated slots but lacking, for example, the positive locating and selecting features taught in the *Beith* patent.

At trial, defendants offered evidence regarding alleged activities with respect to an isolated, abandoned experiment in the form of the alleged Exhibit A-1 wheel (hereinafter also referred to as the "Fujii wheel"). Defendants attempted to show that the alleged Fujii wheel was devised by Ansen as a universal wheel prior to the *Beith* invention. Extensive testimony at trial revealed great doubt as to the time of manufacture, and even the very existence of the Fujii wheel. Consequently, the Trial Court found that the alleged activities of Ansen with respect to the Fujii wheel did not meet the required evidentiary standard of "clear and convincing" proof to be considered as invalidating the *Beith* patent. The Trial Court found that there was no documentary evidence which confirmed the existence of the Fujii wheel at the time alleged. The Court further found that the oral testimony of defendants' witnesses, Johnson and Fujii,

was unreliable in view of the many inconsistent and impeaching statements made under oath by both of the witnesses.

The Trial Court found that the *Beith* patent was valid and infringed. *Specific factual findings were made by the Trial Court on the various factual underpinnings identified in Graham* v. *John Deere, 383 U. S. 1 (1966): scope and content of the prior art; differences between the prior art and the claims at issue; and the level of ordinary skill of the pertinent art* (see Findings 21 through 31, App. 13-14).

Defendants appealed the Trial Court's decision to the Appeals Court which, after retrying all the factual findings of the Trial Court, reversed the Trial Court as well as the Patent Office, and held the *Beith* patent invalid for obviousness under 35 U. S. C. 103. In holding that the patent was obvious, the Appeals Court, *without finding the Trial Court's findings of fact clearly erroneous or even erroneous at all,* reversed the Trial Court's factual findings on the scope and content of the prior art, the differences between the prior art, and the level of ordinary skill. It is these unwarranted and arbitrary actions that are the subject of this Petition.

REASONS FOR ALLOWANCE OF WRIT.

1. The Conflict Among the Circuits as to the Extent of Review of the Issue of Non-obviousness Should Be Resolved.

Ten years after the *Graham* decision which was supposed to clarify matters, there is still a conflict among the decisions of the Circuits as to the standard of Appellate review of the issue of non-obviousness under 35 U. S. C. 103. One group of Circuits utilizes the "clearly erroneous" standard considering the determination of non-obviousness as purely factual; another group views the standard of review as being equivalent to that used for purely legal questions; finally, there are still other Circuits that employ standards of review that vacillate between

these two extremes as well as deal with patent validity as a mixed question of fact and law.

Both the law commentators as well as this Court have recognized the confusion that has been engendered by these various interpretations for the *Graham* case as to what extent the elements of patent validity are to be considered questions of law or questions of fact.[3] A review of the Appeals Court decision in the case at bar clearly shows that the Court erroneously

3. The Commission on Revision of the Federal Court Appellate System, in its report entitled "Structure and Internal Procedures; Recommendations for Change" 67 FRD 195 (June, 1975) recognized the conflict by stating:

> "The validity of a patent depends on several components, including novelty, utility, and non-obviousness (invention). The first two are customarily held to present issues of fact. However, the circuits are dividend on whether the element of non-obviousness is a factual question that may be submitted to a jury, or an issue of law to be decided by the judge alone. The question turns in large part on the proper interpretation of the relevant Supreme Court decisions. *At least three circuits have held that non-obviousness is an issue of law, while the Tenth Circuit has adhered to its view that non-obviousness is a factual question.* The issue is litigated frequently, as a review of the decisions in a recent Fifth Circuit opinion makes clear. In the most recent Tenth Circuit case, in which the court acknowledged the conflict, the Supreme Court denied certiorari. *Justice Douglas, in an opinion dissenting from the denial, took note of the differing views among the circuits.*" (*supra,* at 297) [Citations omitted; emphasis ours.]

Existence of the inter-circuit inconsistency in dealing with the issue of non-obviousness has drawn considerable attention from the law commentators. See 3 Patent Law and Practice, White, Patent Litigation: Procedure and Tactics § 7.05 [3]; 1 Patent Law Perspectives § A.1 [1] (Rel. No. 6/1974); Sherman, "Obviousness: A Question of Law or Fact?", 51 J. Pat. Off. Soc'y. 547 (1969); Wepner, *Appellate Review of Patentability,* 56 J. Pat. Off. Soc'y, 216 (1974).

A survey of recent circuit decisions highlights the conflict:

Tenth Circuit: Moore v. *Shultz,* 491, F. 2d 294 (10th Cir. 1974), *cert. denied,* 419 U. S. 930, at 300 (1974); "Thus, within the Tenth Circuit, novelty, utility, and non-obviousness are held to require factual determinations." See also the dissent to the denial for Writ of *Certiorari,* 419 U. S. 930, at 932 (1974) wherein Justice Douglas

(Continued on next page)

justified its excursion into the realm of fact finding regarding the *Graham* factual underpinnings on the ground that obviousness is ultimately a question of law, thereby clearly violating the mandate of *Graham* as to factual underpinnings as well as accepted rules of Appellate review. Initially, the Appeals Court *expressly complimented* the Trial Court's analysis of the issue of non-obviousness:

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argued in favor of granting Certiorari to prevent "haphazard application of the statutory and Constitutional standard".

Ninth Circuit: Hensley v. *Esco,* 375 F. 2d 432 (9th Cir. 1967); here, the question of non-obviousness was held to be a question of law, and the Appeals Court upheld the lower Court's application of the law to the *Graham* factual underpinnings.

Eighth Circuit: Hadfield v. *Ryan Equipment Company,* 456 F. 2d 1218, at 1219 (8th Cir. 1972); ". . . we observed that while the 'several basic factual inquiries' are to be reviewed within the confines of Rule 52(a) as findings of fact, the ultimate determination of obviousness *vel nan,* is to be reviewed as a question of law. [Citation omitted.] Under these principles the district court's findings with respect to the basic factual inquiries will be sustained unless clearly erroneous, and we will render an independent judgment on the issue of obviousness."

Seventh Circuit: Panther Pumps & Equipment Co., Inc. v. *Hydrocraft, Inc.,* 468 F. 2d 225, at 227 (7th Cir. 1972); "Unquestionably, the issue of validity is a question of law. Moreover, as this Court squarely held, after considering the matter *en banc,* the issue of obviousness is also a question of law."

Sixth Circuit: Westwood Chemical, Inc. v. *The Owens-Corning Fiberglas Corp.,* 445 F.2d 911 (6th Cir. 1971), *cert denied,* 405 U. S. 917 (1972); non-obviousness is held to be a question of law based on the *Graham* factual determinations.

Fifth Circuit: White v. *Mar-Bel, Inc.,* 509 F. 2d 287, at 290 (5th Cir. 1975); "That obviousness is a question of law cannot be doubted, but it must rest upon factual underpinning."

Fourth Circuit: Blohm and Voss A. G. v. *The Prudential-Grace Lines, Inc.,* 489 F. 2d 231 (4th Cir. 1973), *cert. denied* 419 U. S. 840 (1974); non-obviousness is characterized as a question of law. The dissent in *Blohm,* however, characterizes the majority's analysis of non-obviousness as "a *de novo* factual inquiry", upsetting the trial court's findings, thus encapsulating and perhaps best typifying the confused approach taken in resolving the question of non-obviousness in view of the required factual determinations set forth in *Graham* (*supra,* at 248).

(Continued on next page)

"There is no basis for criticizing the district court's analysis of this invention. He followed the procedure mandated by Graham vs. John Deere Co., 383 U.S. 1, 17-18, 86 S.Ct. 684, 15 L.Ed. 2d 545, [sic] his findings evidenced a thorough understanding of the invention and the prior art, and his judgment on the ultimate issue of validity is entitled to special respect because of his better opportunity to have the exhibits explained to him by expert witnesses and by the arguments of counsel. Nevertheless,

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(Continued from preceding page)

Third Circuit: Trio Process Corporation v. *L. Goldstein's Sons, Inc.,* 461 F. 2d 66 (3rd Cir. 1972); Non-obviousness is an ultimate legal conclusion, and the trial judge's ultimate legal conclusion as to validity carried with it the necessary implication that the differences between the invention and the prior art were obvious to a person having ordinary skill in the pertinent art, since the trial judge's findings indicate that he followed the tests mandated by *Graham.*

Second Circuit: Koppers Co., Inc. v. *S & S Corrugated Paper Machinery Co., Inc.,* 517 F. 2d 1182, at 1189 (2nd Cir. 1975); "This latter conclusion of obviousness is a matter of law for appellate review rather than a finding of fact. [Citations omitted.] We accordingly reviewed the record to reach an independent conclusion of law".

First Circuit: Shanklin Cork v. *Springfield Photo Mount Company,* 521 F. 2d 609, at 616 (1st Cir. 1975), *cert. denied,* 44 L. W. 3471 (1975); "Within this context [factual underpinnings required by *Graham*] the determination of non obviousness is a question of fact [citations omitted] and this court may not set aside the district court's findings unless they are clearly erroneous [citations omitted]".

D. C. Circuit: Blair v. *Dowd's Inc.,* 438 F. 2d 136 (D. C. Cir. 1970); Non-obviousness is a question of law, and the trial judge correctly made findings of fact mandated by *Graham* and drew a proper legal conclusion therefrom.

The view holding non-obviousness to be a question of law has found support in the D. C., Second, Third, Fourth, Fifth, Sixth, Seventh, Eighth, and Ninth Circuits. The First and Tenth Circuits persist in treating the issue as one of fact. However, even among those circuits treating the question as one of law, application of a standard of Appellate review is far from consistent, resulting in instances where Appeals Courts have been tempted to form their own judgments as to fact issues more properly relegated to the trial courts which should properly be disturbed only if clearly erroneous. See 23 ALR Fed. 326 at 352 for a discussion of the ofttimes tortuous and inconsistent approach taken by the courts.

> the obviousness question raises an issue of law on which we have an opportunity to make an independent judgment." (523 F. 2d at 641, App. 6.)

The Appeals Court used an erroneous standard of review in making its *own independent findings* with respect to the *Graham* "factual underpinnings" on the scope and content of the prior art, the differences between the prior art and the subject matter of the *Beith* patent, and the level of ordinary skill in the pertinent art.

A. Appeals Court Retrial of Scope and Content of Prior Art.

As to the matter of scope and content of the prior art, the Appeals Court erroneously found that the rejected teachings of the Fujii wheel (Exhibit A-1) and the other activities of Ansen were part of the prior art. See, for example, the Appeals Court Opinion wherein the court stated:

> "At about the same time that Beith developed the patented wheel, several employees of defendant Ansen were experimenting with the 'Fujii wheel' . . ." (523 F. 2d at 638, App. 3.)

Also, the court stated that:

> "We have also considered the relevance of the Fujii wheel. The fact that Ansen also experimented with enlarged lug openings and inserts is consistent with our conclusion that the concept was obvious . . ." (523 F. 2d at 642, App. 7.)

The Trial Court had specifically found that the Fujii wheel was *not* part of the prior art:

> "Defendant sought to invalidate the Beith patent on the grounds that Ansen's 'Fujii' [A-1] wheel constituted prior art in the public sphere as contemplated in 35 U.S.C. § 102(a). This contention is *rejected* for several reasons. First, Ansen did not sufficiently establish that the A-1 wheel, assuming arguendo that it was anticipatory, was in the public domain one year prior to the date of Beith's invention. This is highlighted by the conflicting testimony

> of Ansen's employees as to dates and exactly what was done to the wheel. Also, the lack of documentation and the casual manner in which the wheel was handled detract from the testimony's credibility and weight.
>
> "Second, the Court believes that Ansen's use of the A-1 wheel, assuming its existence at the time claimed, was merely an abandoned experiment. No records were kept or formal tests made. The wheel was out of Ansen's control for several years and was kept in a storage room. It was not shown to Ostergaard, who was aiding Ansen in its wheel development program. Ansen never pursued the manufacture of the wheel nor did it sell or attempt to sell even one wheel, and in fact abandoned it in favor of other types of wheels. See, e.g., Illinois Tool Works, Inc. v. Continental Can Co., 273 F. Supp. 94, 154 USPQ 401 (N. D. Ill. 1967), *aff'd*, 397 F.2d 517, 158 USPQ 437 (7th Cir. 1968).
>
> "Third, the Court believes that the evidence is not sufficient to show that the Fujii wheel 'anticipated' Beith's invention. . . ." (183 U. S. P. Q. at 697, App. 16) (Emphasis ours.)

In further *re*determinating the scope and content of the prior art the Appeals Court erroneously relied on the *Adair* and *Siler* patents—patents cited, considered and rejected by the Patent Office as well as by the Trial Court. The Trial Court's Findings of Fact 21, 22, 28, 30 and 31 stated *inter alia*:

> "21. The most pertinent patents relied on by the defendants are demonstrative of the scope and content of the prior art. These were the Adair patent (No. 2,590,363, issued in March 1952); the Vachon et al. patent (No. 3,166,357, issued in January 1965); the Martin patent (No. 3,025,109, issued in March 1962); the Hunter patent (No. 3,207,557, issued in September 1965); the Laycock British patent (No. 859,193, issued in January 1961); the Italian patent (No. 579,294, issued in May 1958); and the Crowther patent (No. 1,940,675, issued in December 1933). All of these patents, except Crowther, were cited by the U.S. Patent Office during the prosecution of the Beith patent.

"22. The Adair patent discloses a universal emergency wheel having elongated lug bolt apertures in the web. The apertures are radially elongated. Certain of the apertures are enlarged, i.e., the width thereof is much larger than the diameter of the lug bolt so that the lug bolts fit juxtaposed to one side of the apertures. *There is no easy way of positively locating and centering the Adair wheel on the hub. Also, there is no adapter utilized or taught by Adair; this is noticeably lacking. Since there is no adapter, there can be no seat region for an adapter.* The lug bolt apertures each have a separate chamfer at each end and a separate chamfer in the middle. The chamfers are to match the frusto-conical portion of the lug bolt nuts, but act to bend the lug bolts if the lug bolt nuts are tightened to the required torque. *The inventor Adair testified that the sample wheels which were manufactured did not have chamfers. Accordingly, Adair could not possibly have looked on the chamfers shown in the patent as necessary in his wheel for location.*

Furthermore, the Adair wheel does not provide a reliable wheel location, since it depends on the visual placement of the bolts on the enlarged opening and the friction created by the nut on the opening for positioning. The test which defendant ran on the Adair wheel disclosed that the wheel did not have a high level of reliability. Its rate of malfunction also was high. This supports plaintiffs' [sic] proposition and the inventor's conception that the wheel was meant only for emergency use and could not be relied upon as a permanent wheel.

"28. The Crowther patent was not cited by the United States Patent Office; however, it is far less important or pertinent than those patents that were cited by the Patent Office. Crowther is not concerned with a universal wheel; rather, it is concerned merely with detachably mounting wheels on hubs. Crowther provides a bolt nut having a convex split collar which cooperates with the concave contour of the seat around the lug bolt aperture to overcome any eccentricity caused by the attachment of the wheel to the hub. Crowther's collar is neither designed to, nor does it perform the function of the Beith adapter. Therefore, it is neither the adapter nor the equivalent of

the adapter. Also, Crowther fails to teach lug bolt apertures of a size to accommodate lug bolts arranged in different lug bolt circle patterns. *The statutory presumption of validity of the Beith patent is strengthened since the most pertinent prior art relied upon by the defendants consists of patents cited and considered by the Patent Office plus others that were less pertinent than what was considered in the prosecution of the Beith patent in the Patent Office.*

"30. After studying all of the prior art in the record, in addition to the aforementioned patents, the Court finds that there has been shown no prior art of record that includes any patents or written publications which overcome the statutory presumption of patent validity by clearly and convincingly proving that all the elements of the Beith patent were ever used or taught as claimed in the Beith patent prior to Beith's invention.

"31. *Nowhere in the prior art shown is there any prior patent or any combination of prior art patents that would enable one skilled in the art to construct the Beith invention.* Further, there is no justification for combining and modifying the patents for anticipation as the defendants assert. The prior art patents do not suggest or teach how they can be combined and modified in one particular way as Beith taught without utilizing the teachings of the Beith patent or without exercising invention. It should also be noted that there was no pattern in the development of the art which led to Beith's invention. In fact, the trend in development was toward the use of adapter plates rather than working with the lug bolt apertures themselves. Thus, even if individually the component parts of Beith were known, they are combined in such a way as to create a synergistic effect." (183 U. S. P. Q. at 694-695, App. 13-14) (Emphasis ours.)

Despite these specific determinations, the Appeals Court, without setting these findings aside as clearly erroneous, decided that the *Adair* and *Siler* patents taught "the essential parts [features]" of the *Beith* invention (523 F. 2d at 641, App. 6).

Further, the Appeals Court, without setting aside any findings of fact, also relied on an allegedly erased drawing of an inde-

pendent engineer, Ostergaard, who did some work for Ansen (523 F. 2d at 638, App. 3). The Trial Court had found that this evidence was of doubtful reliability (183 U. S. P. Q. at 693, App. 12).

B. Appeals Court Retrial of the Differences Between the Claimed Subject Matter and Prior Art.

The Appeals Court's erroneous retrial of the differences between the claims of the *Beith* invention and the prior art is in sharp contrast to the pertinent findings of the Trial Court. For example, the Trial Court found that an essential difference is the capability of using the adapter to selectively enable the wheel to fit a plurality of standard bolt diameters when the adapters are reoriented and seated in different positions (183 U. S. P. Q. at 695, App. 14). The Appeals Court, on the same characteristic, stated:

> "No particular importance is attached to the reversible character of the insert containing the eccentric hole because the patent would equally cover the use of three or more separate inserts, none of which was reversible." (523 F. 2d at 641, Footnote 14, App. 6.)

The Appeals Court relied on a misapprehension of fact as to the lack of importance of the dual orientation capability of the adapters where it characterized Beith's conception as having *only* "two essential parts [features]" (523 F. 2d at 641, App. 6).

(1) enlarging the lug [bolt] apertures; and

(2) effectively reducing the size of the lug bolt apertures to enable them to receive the normal lug bolts.

The Appeals Court completely ignored the unique features provided by the rabbetted apertured seat region of the wheel and adapter combination *as defined in the claims*, such as: (1) *the selectivity or different bolt patterns due to the capability of seating the adapters in at least two orientations;* and (2) *the automatic selectivity provided by non-circular adapters without visual*

orientation. In this regard, the Court is directed, for example, to Claim 1 of the patent in suit which contains the following language:

> ". . . the adapter receiving seat region and adapter means formed to allow the seat region to snugly receive the adapter means in at least two orientations . . ." (App. 29).

Both of these differences which were totally overlooked by the Appeals Court are set forth in Findings of Fact 32 and 33 as well as in the claims of the *Beith* patent (183 U. S. P. Q. at 695, App. 14).

C. Appeals Court Retrial of the Level of Ordinary Skill in the Pertinent Art.

Findings 34 and 35 of the Trial Court distinctly and clearly resolved the "level of ordinary skill" based on many factual findings. The Appeals Court seemingly agreed with Finding 34 which states *inter alia*:

> "The level of ordinary skill in the automotive wheel field is such that those skilled in the art would not have gone in the direction that Beith went at the time of his invention . . ." (183 U. S. P. Q. at 695, App. 14).

Finding 35 states *inter alia*:

> ". . . In addition, as required by 35 U.S.C. 103, this Court has given full and careful consideration to the scope and content of the prior art, with respect to universal wheels, and therefore, to the differences between the prior art and the claimed subject matter of the patent, *and to the level of ordinary skill in the art, with emphasis on the actual performance of men of at least ordinary skill.* Against this background, the Court finds that the claimed subject matter would not have been obvious to a man of ordinary skill in the art at the time the invention was made, in view of the prior art asserted by defendants, taken either singly or in combination. Moreover, the finding by this Court of non-obviousness is reinforced by the objective evidence of patentability present in this case, including the recognition

> of great merit paid to the invention by Filter Dynamics International, Inc., as shown by their investment in the patent, and by the commercial success of the patented invention, the long-felt need for an acceptable universal wheel, the prior failures on the part of workers (such as Johnson) of at least ordinary skill in the art, and failure on the part of the defendants to find more pertinent prior art than that which was cited in the United States Patent Office, even after an exhaustive search for such prior art." (183 U. S. P. Q. at 696, App. 15) (Emphasis ours.)

The Appeals Court, in its erroneous retrial of the facts, went on to reject the impressive array of historical *facts* as found above, when it stated:

> ". . . The [Beith] combination . . . *would* therefore be patentable . . . if a person skilled in the art, fully aware of the separate elements of Beith's concept would not be expected to combine them . . . In this case . . . it *seems* rather clear that an artisan who conceived of the first step in his consideration of the problem of making an interchangeable wheel *would* readily recognize the need for an adapter . . ." (523 F. 2d at 641, App. 6) (Emphasis ours.)

The Appeals Court, by its action, implicitly rejected Findings 34 and 35 without finding them clearly erroneous, and substituted its own subjective feeling to evaluate the "level of skill". The erroneous conclusion that the *Beith* invention was obvious was therefore based upon the treatment by the Appeals Court of the issue as *purely legal,* consequentially retrying almost every factual finding of the Trial Court, thereby violating the accepted rules of Appellate review.

2. The Decision of the Appeals Court in Reviewing the Trial Court's Finding of Patent Validity Is in Conflict with the Pronouncements of This Court Relating to 35 U. S. C. Section 103.

The Appeals Court standard of review in the face of the Trial Court's findings of fact demonstrates that the Seventh Circuit Appeals Court is one of a group of Circuits which

consider the issue of obviousness as a *purely legal* issue, and, as such, is in conflict with this Court's interpretation of 35 U. S. C. Section 103 as set forth in *Graham* v. *John Deere Co.*, 383 U. S. 1 (1966), *Anderson's-Black Rock Inc.* v. *Pavement Salvage Co.*, 396 U. S. 57 (1969), and *Sakraida* v. *Ag Pro, Inc.*, ... U. S. ....., 189 U. S. P. Q. 449 (1976) (App. 19-23). In *Ag Pro,* this Court reaffirmed the *Graham* and *Anderson's-Black Rock* decisions as authority for the proposition that while the ultimate issue of the validity of a patent is one of law, it depends on several *factual* questions.

To apply the *Graham* doctrine, in the case at bar, in the manner that the Appeals Court did, renders the doctrine meaningless. If the objective, pragmatic evidence which formed the findings of fact of the Trial Court regarding the *Graham* factual considerations can be ignored in favor of the subjective reaction of the Appeals Court, then one of the most important objectives of this Court in the *Graham* decision, *i.e.,* to achieve uniformity and definiteness in the trial and review of the issue of obviousness, will be defeated.

In particular, this Court held that the standard of invention to be applied to determine the validity of a patent had been codified by Section 103 of the Patent Act of 1952 in the concept of "non-obviousness" which took the place of the "less definite [term] 'invention' " (383 U. S. at 14) that had grown to be widely used in the more than one hundred decisions since the decision in *Hotchkiss* v. *Greenwood,* 52 U. S. 248 (1851).

This Honorable Court extensively analyzed the background and legislative history of Section 103 in *Graham* and stated that:

> "Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined." (383 U. S. at 17.)

The purpose of requiring the Courts to follow this decisional process was clear. It was to prevent an empty, meaningless procedure that would provide no greater uniformity or definiteness than had been the case under the *Hotchkiss* rule. The purpose was to make the determination of non-obviousness a "functional" decision (383 U. S. at 12) based as much as possible on objective evidence resulting from "factual inquiries" (383 U. S. at 17) made in "factual context" (383 U. S. at 18). The express goal was to bring "more stability and predictability in determining patentability and validity" (383 U. S. at 16), thus assuring achievement insofar as possible of "that uniformity and definiteness which Congress called for in the 1952 Act" (383 U. S. at 15, 18).

The Court specifically stated that:

> "While the ultimate question of patentability is one of law . . . the Section 103 condition which is but one of three conditions, each of which must be satisfied, lends itself to several basic factual inquiries." (383 U. S. at 17.)

Following *Graham* in the *Anderson's-Black Rock* case, this Honorable Court restated that "strict observance" of the requi site factual findings of *Graham* is necessary in determining non-obviousness under Section 103. In its recent pronouncement in *Ag Pro*, this Court again reaffirmed that the Appeals Court cannot reverse findings of fact dealing with patent validity unless there isn't support in the record and therefore is clearly erroneous. Thus, Rule 52(a) F. R. C. P. was followed by this Court in *Ag Pro* in reviewing findings of fact of the Trial Court.

Yet in the case at bar, after complimenting the Trial Court on its findings, the Appeals Court retried substantially *all* the facts on the ground that "obviousness is an issue of law". As has happened in many other cases, the Court "justified" its retrial of the facts on the basis that obviousness or non-obviousness is ultimately a question of law. *By reforming or "retrying" the factual findings regarding scope and content of the prior art, the differences between the prior art and the claims in issue, and the level of ordinary skill in the art, while praising*

the findings of the Trial Court, the Appeals Court has defeated the purpose of the Graham doctrine.

The question of obviousness was one of the foremost issues at the trial as is evidenced by the treatment of the subject in the Trial Court's Opinion. The late Honorable Richard W. McClaren recognized the applicability of Section 103 and acknowledged this Court's mandate for a thorough consideration of the issue. The Trial Court extensively reviewed the prior art in order to determine the scope and content thereof in Findings 21 through 31 (183 U. S. P. Q. at 694-695, App. 13-14). Next, the Trial Court reviewed the differences between the prior art and claims at issue in Findings 32 and 33 (183 U. S. P. Q. at 695, App. 14). Then the Trial Court made specific findings as to the level of ordinary skill in the art in Findings 34 and 35 (183 U. S. P. Q. at 695-696, App. 14-15).

In making its factual determinations leading to the conclusions of non-obviousness, the Trial Court clearly recognized that its primary responsibility was to evaluate the invention in light of the prior art and also in light of the secondary considerations of *Graham*. As the trial record shows, each of the items of prior art was the subject of testimony and documentary evidence which underwent careful scrutiny by the trial judge. From a review of the Trial Court's decision, it is clear that the Trial Court considered and determined the question of non-obviousness in precisely the method ordained in Section 103 and decreed by this Court.

Despite the Appeals Court's praise of the Trial Court, it is evident that the Court chose to substitute its own judgment for the Trial Court's evaluation of the witnesses' testimony based upon the cold record on appeal. It is also clear that the Appeals Court read things into the exhibits and the testimony that are simply not there, leading to results at substantial variance with the evidence and findings of the Trial Court. Petitioner submits that the Trial Court went *beyond* its jurisdiction to review the

ultimate question of non-obviousness. Therefore, this Petition should be granted to make this decision consistent with the decisions in *Graham*, *Anderson's-Black Rock*, as well as *Ag Pro*.

3. The Appeals Court Incorrectly Distinguished the Case at Bar from U. S. v. Adams.

The Appeals Court's decision was completely contrary to the case of *U. S.* v. *Adams*, 383 U. S. 39 (1966). In that case, this Court stated that known disadvantages in old devices which would naturally discourage the search for new inventions may be taken into account in determining obviousness. Further, this Court stated that disbelief by experts in the art would also be evidence of non-obviousness. In the case at bar, both the Trial Court and the Appeals Court found that *Beith* had gone in a direction *opposite* to good engineering practice, since the part of the wheel where the elongated slots were to be formed was structurally the weakest part of the wheel. Much concern had been shown for the strength of wheels in this critical area.

The Appeals Court agreed with the Trial Court's finding that *Beith* took a step in a direction opposed to the teachings of the prior art and stated that:

> ". . . Beith's invention took a step in a direction opposed to the teaching in the prior art, are supported not only by Siler and by Beith's testimony describing the first foundry's objection to sandcasting a wheel with larger openings in the web, but also by Plaintiff's expert Nass, who testified that enlarging the holes to accept different lug patterns would be considered 'a pretty brash move' likely to produce 'some kind of trouble' " (523 F. 2d at 640, App. 5).

Even with these statements, the Appeals Court went on to distinguish this case from *Adams* based on its erroneous view of the facts as well as the law. The Appeals Court, in its erroneous reevaluation of the evidence, attempted to distinguish this case from *Adams* on the ground that the expert Nass testified that there is always some trouble with a new design which can be

overcome; the by-word was to "be careful with the new design". In Petitioner's view, a reading of the Opinions below and the Record, confirms that neither Nass' testimony nor the Trial Court's view of it can be interpreted to mean that the known problems with Beith's proposed design should have been taken as routine design problems capable of routine solutions. Otherwise, Nass or the Trial Court or even the Appeals Court would not have confirmed that Beith's invention went against good "engineering principles" and it was a "brash move" bound to produce some "kind of trouble" (523 F. 2d at 640, App. 5). Thus, the Appeals Court took Nass' testimony out of context and unjustifiably reshaped it in a manner that was not intended by Nass or the Trial Court. This is yet another example of what happens when an Appeals Court retries facts most properly determined at the trial level.

Further, in finding for the defendants, the Appeals Court erroneously limited the teachings of *Adams* to a situation where investigation into the area in which the invention was made would have been "purposeless" (523 F. 2d at 642, App. 7). The proper test in the *Adams* case is whether known disadvantages in the prior art would *discourage* the search for new inventions in a particular area, that is, were artisans at the time of the invention *discouraged* from further effort. The test is *not* whether artisans were barred by a feeling of "purposelessness" from investigating in the direction that the inventor had taken. If "purposelessness" were the standard to be used to judge whether an investigation was inventive or unobvious, all inventions, including *Adams'* invention, would have to be considered obvious! Certainly such an impossible standard was not intended by this Court in the *Adams* case.

Since the Appeals Court relied heavily on this erroneous limited interpretation of the *Adams* case as well as on an erroneous reshaping of the facts in reaching its conclusion of obviousness, it is clear that the Appeals Court would have sustained the validity of the patent had it not made these errors. Thus, the Appeals Court decision should be reversed.

CONCLUSION.

While it should be noted that the *Beith* patent was purchased by the Petitioner for $1,375,000.00 and approximately $7,500,000.00 had been invested in its commercial exploitation prior to trial, the decision of the Appeals Court goes beyond the plight of the parties involved, since the legal criteria of patentability used by the Trial and Reviewing Courts is of grave public concern. It has long been recognized that arbitrary and subjective methods in trying and reviewing patent cases will eventually destroy the essence of the patent system and thereby destroy any meaning to Article I, Section 8, Clause 8 of the Constitution, the purpose of which is to promote and stimulate the progress of science and the arts.

Even 200 years after the adoption of the Constitution, it is well recognized that the United States should preserve the patent system "to provide a maximum of growth effort at the least cost to the taxpayer" (speech of Patent Examiner C. Marshall Dann, as reviewed in BNA's *Patent, Trademark and Copyright Journal*, No. 278, May 13, 1976).

Respectfully submitted,

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Appendix

Note:

Appendix pages App. 1 through App. 23 are in this volume. Appendix pages App. 24 through App. 29 [Beith Patent No. 3,329,468] are in a separate, larger Supplemental Appendix.

different makes of cars was obvious, and accordingly the patent was invalid.

Reversed.

1. Patents ⇐324.55(3, 4)

District court's judgment on ultimate issue of validity of patent was entitled to special respect because of his better opportunity to have the exhibits explained to him by expert witnesses and by arguments of counsel, but obviousness question raised an issue of law on which the Court of Appeals had a responsibility to make an independent judgment.

2. Patents ⇐18

Subject matter of patent on automobile wheel that would fit different makes of cars was obvious, and accordingly the patent was invalid. 35 U.S.C.A. § 103.

E-T INDUSTRIES, INC.,
Plaintiff-Defendant-Appellee,

v.

WHITTAKER CORP. and Des Plaines Grand Automotive Speed Center, Inc.,
Defendants-Plaintiffs-Appellants.

No. 74-1924.

United States Court of Appeals, Seventh Circuit.

Argued Feb. 24, 1975.

Decided Sept. 25, 1975.

In patent case involving competing manufacturers of "mag wheels," the United States District Court for the Northern District of Illinois, Eastern Division, Richard W. McLaren, J., entered judgment from which appeal was taken. The Court of Appeals, Stevens, Circuit Judge, held that subject matter of patent on automobile wheel that would fit

Richard Bushnell, Chicago, Ill., for defendants-plaintiffs-appellants.

Irwin C. Alter, Chicago, Ill., for plaintiff-defendant-appellee.

Before CASTLE, Senior Circuit Judge, and SWYGERT and STEVENS, Circuit Judges.

STEVENS, Circuit Judge.

Were it not for the fact that the invention was a step in a direction opposite to what was considered good engineering practice, Beith's discovery of an automobile wheel that would fit different makes of cars would surely be considered obvious. The principal question presented by this appeal is whether the district court's findings that Beith ignored the risks that would have deterred others skilled in the art saves the patentability of an otherwise obvious conception.

1. It would appear, however, that the Pennsylvania regulation may not be enforced insofar as it predicates eligibility for medical assistance payments on conditions that were specifically invalidated in *Doe v. Bolton*, 410 U.S. 179, 93 S.Ct. 739, 35 L.Ed.2d 201 (1973), namely, a concurrence of two doctors and performance of the procedure in an accredited hospital.

I.

The parties are competing manufacturers of "mag wheels."[1] Mag wheels are specially designed wheels, usually cast aluminum and sometimes containing a magnesium alloy, intended to enhance the appearance of a car. They are more expensive than normal wheels. A buyer of such wheels, especially one who frequently changes cars, often wants to use the same wheels on successive cars. Car wheels, however, are not interchangeable because there has been no standardization among automobile manufacturers on the arrangement of the lugs which project from the brake drum or axle to secure the wheel. The lugs, of course, are arranged in a circle and usually there are five for each wheel. The most popular makes of cars, however, employ lug bolt circles of three different radii —4½ inches for Ford and Chrysler cars; 4¾ inches for Chevrolets; and 5 inches for the larger General Motors cars. The marketability of a mag wheel is significantly greater if it will fit all three of the most frequently used lug bolt arrangements than if it will fit only one.[2] The purpose of Beith's invention was to make a wheel that would fit lug bolt circles of different radii.

Beith's solution to the problem was simple. He elongated the lug apertures in the wheel sufficiently to accommodate lug bolts arranged in circles of different radii; he then inserted adapters to fit snugly into the enlarged lug apertures; each adapter, in turn, contained a hole through which the lug projected. One set of adapters contained off-center holes. If such an adapter was turned in one direction, the opening would be 4½ inches from the axle; reversed, the radius would be 5 inches. In a second set of adapters a central hole would accommodate a radius of 4¾ inches.

The patent describes various shapes of lug openings and adapters to fit them. The basic idea, however, was simply an enlarged lug opening to be fitted snugly with one or more inserted adapters, the position of which would determine the lug circle radius which the wheel would fit.

Beith conceived his invention in January of 1965. At that time he was running a small company manufacturing custom wheels with three different predrilled bolt patterns.[3] He took one of those wheels and enlarged the lug aperture by drilling all three standard lug patterns into it and then experimented with cardboard inserts to make sure that the wheel would fit all three sizes.

He requested the foundry which was casting wheels for his company to sandcast the new wheel for him with the enlarged lug openings. Beith testified that executives of the foundry expressed concern about their ability to sandcast the holes accurately and about the possibility that the wheel would be weakened by the elimination of additional metal, which in turn might subject the company to product liability problems. A second foundry, which used a permanent mold process rather than sandcasting, agreed to make wheels for Beith. That company insisted, however, that Beith make better drawings and recommended an engineer to review the project.

1. Plaintiff E-T Industries is a wholly-owned subsidiary of Filter Dynamics International, Inc., which purchased E-T's stock from the inventor Beith in 1970. Ansen Automotive Industries was at the time of the trial a wholly-owned subsidiary of Whittaker Corporation. After trial Ansen was merged into Whittaker, which was then substituted as a defendant. Defendant Des Plaines Grand Automotive Speed Center, Inc., is a distributor of Ansen's wheels.

2. Because of the high cost of custom wheels, the variety which a dealer could carry in inventory was limited. Thus, a wheel which could be used interchangeably on all three sized lug patterns provided the dealer, as well as the customer, with significant economies.

3. Beith graduated from college in 1958, taught school for about five years, and apparently formed his wheel company about a year or two before he conceived the patented invention.

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Beith discussed the problem of weakening the wheel by enlarging the lug apertures, but the engineer "felt that it could be accomplished, or at least we could certainly experiment; the only way we would really know was to go ahead and make the drawings, have molds made, cast some wheels and really, because there was no testing at that time, market the product and find out the real test, the real proof. It was all conjective at that point as to whether the product would function out on the highway, on the automobiles, in the marketplace." Tr. 77.

Beith filed his original patent application in July. In October, 1965, he tested the new wheel in operation, found that it worked, and began to sell it commercially. Sales increased dramatically. Plaintiff had commenced operation on an investment of $750; in 1970, Beith sold the company to Filter Dynamics for FDI stock valued at $1,375,000. Thereafter, annual sales grew from about $2,500,000 to almost $13,000,000 in three years.

At about the same time that Beith developed the patented wheel, several employees of defendant Ansen were experimenting with the "Fujii wheel"—so named because it was placed on the 1951 Chevrolet which an Ansen employee named Dennis Fujii drove to work every day. The Fujii wheel was a standard wheel on which the lug apertures were enlarged to hold an insert which enabled the wheel to fit the 4¾ inch lug circle. The insert used in the Fujii wheel would fit only a Chevrolet, but it is apparent that the Fujii concept, just like Beith's, would be equally useful with different inserts for different sizes.[4] Defendant adduced oral testimony to prove that the Fujii wheel was in public use more than a year before Beith filed his patent application. The district court found this evidence of doubtful reliability.[5] Moreover, he noted that Ansen did not proceed with the development of an interchangeable wheel employing the Fujii concept, but instead developed an entirely different wheel embodying a so-called "knock-off lug" modeled after wheels used on racing cars.

Later, after acquiring Ansen, defendant investigated the Beith patent and started to manufacture and sell wheels which the district court found to infringe.

The district court reviewed the prior art in detail. We need mention only two items, Adair[6] and Siler.[7]

Adair disclosed a wheel which will fit lug circles not only of different diameters but also containing different numbers of lugs. Like Beith, it had elongated lug apertures to accommodate different sizes, but it also had extra openings, some of double width, to make it possible to fit six as well as five lugs with the

4. The insert used in the Fujii wheel contained an off-center hole to receive lug bolts from a Chevrolet. Since the lug circle radius on a Chevrolet is 4¾ inches, reversal of that insert would accommodate a radius of 5¼ inches. No American car uses that lug arrangement and, therefore, as the district court found, the actual Fujii wheel fit only one sized car. The district court also noted doubt as to whether the insert actually used with the Fujii wheel could have been reversed. It seems quite clear, however, that the invention described in the patent would cover a wheel which used three different inserts to fit the three wheel sizes, as well as one which uses two inserts, one containing a concentric hole and the other containing an eccentric hole useful in two positions to accommodate three sizes.

5. The evidence established that Ansen initiated a wheel development program in 1964. An independent engineer named Ostgaard prepared a number of design drawings for Ansen during the period between May and November, 1964. Since he was not told about the Fujii wheel, it seems likely that that wheel was made later. On the other hand, one of Ostgaard's early pencilled drawings originally depicted enlarged lug apertures which were erased when a design change was made.

6. Adair Patent No. 2,590,363, issued on March 25, 1952, covering "wheel adaptable to different hubs."

7. Siler Patent No. 3,006,443, issued October 31, 1961, covering "Method and Apertures for Attaching Juxtaposed Members."

APP. 3

same wheel.[8] Adair merely disclosed the idea—which we think would be obvious even without Adair—that enlarged lug apertures would enable a wheel to fit lug circles of different diameters.

The Siler invention did not relate to wheels. It was concerned with the problem of securely attaching two parts, such as metal plates or sheets, which contain holes that are somewhat misaligned, and therefore will not accommodate a fastener such as a rivet or a bolt of the same size as the holes. The patent teaches that it is undesirable simply to enlarge the hole in one of the two plates and then to use a rivet or bolt of the same size as the original hole.[9] Instead, the patent teaches the use of adapters containing small off-center holes which can be aligned with one another, and through which a smaller bolt or pin can be inserted to fasten the members together.

The Siler patent is relevant to the Beith invention in two different ways. On the one hand, its admonition not to enlarge bolt holes unnecessarily supports the district court's findings that Beith's conception, insofar as it enlarged the lug apertures in the web of the wheel, was contrary to accepted engineering practice.[10] On the other hand, Siler also taught that an adapter, or insert, could be used to secure a relatively small bolt

8. Adair's basic idea was to have a universal emergency wheel which could be substituted for a damaged wheel on almost any vehicle in order that the vehicle could be driven instead of towed to a repair facility.

9. The Siler specifications state, in part:

"Frequently, the mechanic working with supposedly exact and interchangeable parts finds some members deviating so far from the desired standard that they cannot be bolted or riveted or otherwise properly fixed together. Thereupon, he frequently resorts to an undesirable expedient which will forever thereafter preclude the replacement and integration into the device (as when undergoing repairs) of a truly standardized part or parts.

"In such undesirable practice, the mechanic proceeds to drill new holes by hand, or ream and enlarge the misaligned holes, so that they will receive bolts or other fastening elements.

"Such expediency and ill considered practice will produce a weakened structure because it has been provided with irregular or enlarged holes greatly exceeding the limits of tolerance allowed by the designing engineers and/or failing to meet the requirements of standards in strength and stability."

10. The relevant findings are Nos. 9 and 34, which read as follows:

"9. The approach Beith decided to take was opposite to what was considered good engineering practice,[4] because the part of the wheel where the elongated slots were to be formed was structurally the weakest part of the wheel. Much concern had been shown for the strength of wheels in this critical area. His solution to the long-existing problem was an unexpected and unobvious acceptable solution since people with ordinary skill would have sought an acceptable solution by using large adapter plates."

"34. The level of ordinary skill in the automotive wheel field is such that those skilled in the art would not have gone in the direction that Beith went at the time of his invention.[9] Beith removed material from what is considered a critical portion of the wheel—the central mounting portion or web near the central hub opening. Thus, Beith went in a direction opposite to the direction that was being taken by those having ordinary skill in the art. By doing so, the public was provided with a universal wheel that was smart looking, in that the elongated slots were directly in the web of the wheel itself and small adapter means were used to obtain universality. Such wheels could be manufactured and operated easily while still having a pleasing appearance as well as reliably locating and attaching the wheel to the brake drum.

[4] *Cf.* U.S. Letters Patent No. 3,006,443 (Siler) at column 1, lines 50–60.

[9] This is brought home by the fact that Ansen rejected the idea of elongated apertures and opted for a plate system at around the same time as Beith was developing his wheel."

The footnotes are the court's.

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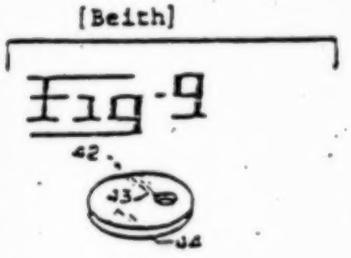
in a large opening.[11] Thus, if we consider the two parts of the Beith invention separately, in effect Siler taught (a) that the lug apertures should not be enlarged, but (b) if they should be enlarged, the oversized openings could nevertheless be secured to a normal lug by using an adapter, or insert, containing a smaller hole fitting the lug bolt.

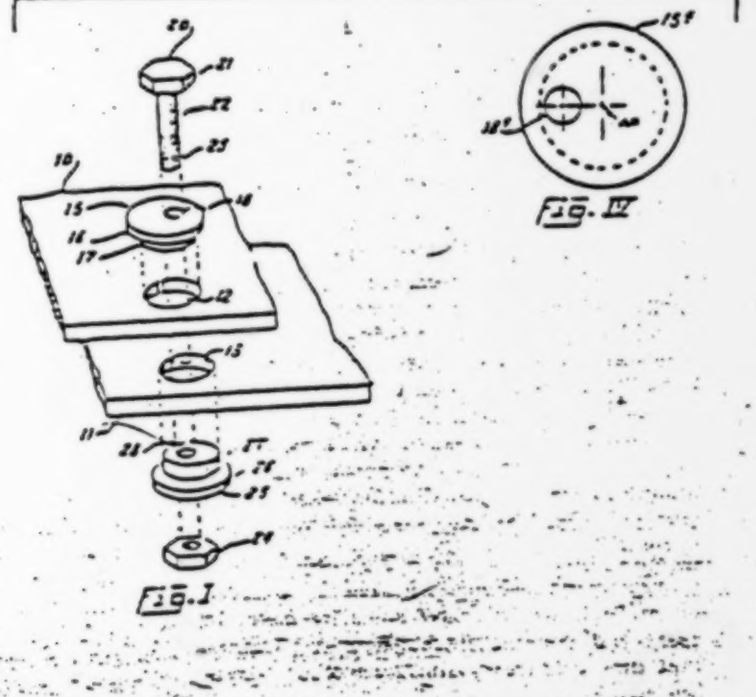
The district court's findings that Beith's invention took a step in a direction opposed to the teaching in the prior art are supported, not only by Siler[12] and by Beith's testimony describing the first foundry's objection to sand-casting a wheel with larger openings in the web, but also by plaintiff's expert Nass, who testified that enlarging the holes to accept different lug patterns would be considered "a pretty brash move" likely to produce "some kind of trouble."[13] He further explained that to

11. The adapter, or insert (44) in Fig. 9 of Beith's patent (shown below on the left) is similar to the adapter, or insert (15) in Figs. I and IV of the Siler patent (shown on the right).

[Beith]



[Siler]



12. Actually, the portion of the Siler specifications on which the district court relied is a comment on the undesirability of enlarging a hole in a prefabricated part, rather than a comment on the possible consequences of designing an entirely new product containing larger holes than those found in a previous design.

13. He testified at Tr. 299–301:

"Q In your opinion would it be good design to remove the amount of material that has been removed there as opposed to just a small circle as a pre-drilled wheel had?

"No. If I might state your question the way I understand it, we assume we start with a wheel that merely has drilled holes in it in normal application. Now we consider enlarging the holes to accept the UNI-LUG system.

"Q Yes, sir. Right.

"A Well, in my opinion that would be a pretty brash move because it is in an area where the stress level is quite high. From the tests I have run, you would be, so to speak, asking for trouble by making a move of this kind.

"Q Would you say that that would be going in the opposite way of good wheel design?

"A I believe logically it would be going in the wrong direction, yes.

"Q Based on that opinion, do you think it would have been expected for some one to

determine whether a change like that would be acceptable, it would be necessary to make several tests, and then added:

Well, I can state that by my experience, that is the typical way that alterations and modifications to wheels are made. Frequently there is very little what you might call rigorous analysis involved in it. They will make a modification and then the wheels will be sent down to me for an evaluation and certain road levels are applied to the wheels, and sometimes the wheels are what is known as stress coated to study the stress pattern in the wheel to gain a knowledge of what is going on in the wheel, and then from that knowledge further changes may be made. There could be an alloy section change made. There could be a section thickness change made or some other changes made to get the wheel up to a point where it would be satisfactory again structurally.

Tr. 301–302. On cross-examination he testified that if a wheel or any other structure is weakened by removing material, the weakness could be counteracted by adding or repositioning other material. For example, he said:

The strength of any structure depends on two things, basically—what the material is that you are using, the quality of the material, and No. 2, on the geometry. Between those two variables you can generally get about everything you need in structure. Tr. 411.

II.

[1] There is no basis for criticizing the district court's analysis of this invention. He followed the procedure mandated by *Graham v. John Deere Co.*, 383 U.S. 1, 17–18, 86 S.Ct. 684, 15 L.Ed.2d 545, his findings evidence a thorough understanding of the invention and the prior art, and his judgment on the ultimate issue of validity is entitled to special respect because of his better opportunity to have the exhibits explained to him by expert witnesses and by the arguments of counsel. Nevertheless, the obviousness question raises an issue of law on which we have a responsibility to make an independent judgment. In this case that judgment involves a three-step consideration: first, whether each element of the invention is obvious; second, if so, whether the combination is obvious; and third, if the combination seems obvious in itself, whether the rejection of the contrary teaching in the prior art requires a different conclusion.

Each of the two essential parts of Beith's conception—first, enlarging the lug apertures to receive bolt arrangements of different radii; and second, effectively reducing the size of the enlarged openings to enable them to receive normal lug bolts—was unquestionably taught by the prior art. The combination, however, was new. It would therefore be patentable if it produced a result other than the anticipated sum of the separate parts, or if a person skilled in the art, fully aware of the separate elements of Beith's concept, would not be expected to combine them when looking for the solution to the problem of making an interchangeable wheel. In this case, the combination cannot be described as synergistic, and it seems rather clear that an artisan who conceived of the first step in his consideration of the problem of making an interchangeable wheel would readily recognize the need for an adapter or an insert.[14] We are persuaded that the ultimate conclusion of non-obviousness can only be supported

go in that direction to reach the result obtained with the UNI-LUG system?

. . . . . .

"My feeling in the matter is that a person, if he appreciated what was going on stress-wise in a wheel, he would soon realize that making a move of this kind, he would probably get into some kind of trouble."

14. No particular importance is attached to the reversible character of the insert containing the eccentric hole because the patent would equally cover the use of three or more separate inserts, none of which was reversible.

by the district court's reliance on the adverse teaching in the prior art.[15]

In *United States v. Adams*, 383 U.S. 39, 86 S.Ct. 708, 15 L.Ed.2d 572, the Court's conclusion that the discovery of a water activated battery, using magnesium cuprous chloride electrodes, was nonobvious rested heavily on evidence that long accepted factors would deter any investigation into the combination used by Adams.[16] The reasoning of the *Adams* case is not applicable to Beith's invention.

The Adams battery generated large quantities of heat during normal operation and the prior art taught that such a battery was not practicable. Moreover, the prior art also taught that water activated batteries were only successful when used with electrolytes harmful to magnesium. The court was persuaded that both of these long-accepted factors would deter *any investigation* of the combination which Adams found to be unexpectedly successful.

In this case, the contrary factor was merely the rather obvious notion that enlarging holes in a structural member will weaken it to some extent. But the record establishes that it was equally clear that some enlargement might be tolerated and that modifications in design or material strength might overcome the effect of the loss of some material. As the testimony of plaintiff's own expert indicates, the problem was not so serious as to deter any investigation at all of enlarged lug apertures, but rather it was a problem typical of almost any new wheel design which would normally require careful testing and perhaps further experimentation and modification.

The prior art taught that interchangeability might be achieved by using enlarged lug apertures, but that any such new design should be carefully tested to be sure it was safe. This prior art warning to be careful with the new design is not, in our judgment, equivalent to the uniform prior art teaching in *Adams* that any investigation of the use of the magnesium electrode in a water activated battery would be purposeless.

We have also considered the relevance of the Fujii wheel. The fact that Ansen also experimented with enlarged lug openings and inserts is consistent with our conclusion that the concept was obvious, whereas the fact that Ansen did not go forward with the development of this kind of wheel until after Beith had demonstrated its feasibility tends to undermine that conclusion. It does not, however, support the applicability of the *Adams* rationale to this case because there is no evidence that Ansen's decision not to go forward with the Fujii wheel rested on any concern about weakness caused by enlarging the lug openings. On the contrary, the fact that the Fujii wheel was in fact made and actually tested indicates that the prior art did not completely deter any experimentation with this concept.

[2] We conclude that the subject matter of the Beith patent was obvious within the meaning of 35 U.S.C. § 103 and, accordingly, that the patent is invalid.

Reversed.

15. We do not ignore the substantial evidence of commercial success which buttresses the district court's conclusion of validity, but such success is not by itself sufficient to show nonobviousness. Rather, it must be weighed with all the other evidence in the record.

Novo Industrial Corporation v. Standard Screw Company, 374 F.2d 824 (7th Cir. 1967); *Application of Cline*, 345 F.2d 847, 52 CCPA 1404 (1965).

16. "We conclude the Adams battery was also nonobvious. As we have seen, the operating characteristics of the Adams battery have been shown to have been unexpected and to have far surpassed then-existing wet batteries. Despite the fact that each of the elements of the Adams battery was well known in the prior art; to combine them as did Adams required that a person reasonably skilled in the prior are must ignore that (1) batteries which continued to operate on an open circuit and which heated in normal use were not practical; and (2) water-activated batteries were successful only when combined with electrolytes detrimental to the use of magnesium. These long-accepted factors, when taken together, would, we believe, deter any investigation into such a combination as is used by Adams. This is not to say that one who merely finds new uses for old inventions by shutting his eyes to their prior disadvantages thereby discovers a patentable innovation. We do say, however, that known disadvantages in old devices which would naturally discourage the search for new inventions may be taken into account in determining obviousness.

"Nor are these the only factors bearing on the question of obviousness. We have seen that at the time Adams perfected his invention noted experts expressed disbelief in it. * * * Furthermore, in a crowded art replete with a century and a half of advancement, the Patent Office found not one reference to cite against the Adams application." 383 U.S. at 51–52, 86 S.Ct. at 715.

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District Court, N. D. Illinois, E. Div.

E-T INDUSTRIES, INC. v. WHITTAKER CORPORATION et al.

70 C 2498, 71 C 3133
Decided Oct. 31, 1974

PATENTS

1. Patentability — Anticipation — Experiments (§51.209)

Defendant's abandonment of experimental device, which is alleged to anticipate plaintiff's patent, confirms that patented invention was not obvious to defendant, who is skilled in the art.

2. Presumption from patent grant — Patent Office consideration of prior art (§55.5)

Statutory presumption of patent validity is strengthened where the most pertinent prior art was cited and considered by Patent Office.

3. Patentability — Anticipation — Combining references (§51.205)

There is no justification for combining and modifying prior art patents for anticipation since they do not suggest or teach how they can be combined and modified without utilizing teachings of patent in suit or without exercising invention; even if individually the component parts of patented device were known, they are combined in such a way as to create a synergistic effect.

4. Patentability — Evidence of — In general (§51.451)

Patentability — Evidence of — Commercial success — In general (§51.4551)

Patentability — Evidence of — Delay and failure of others to produce invention (§51.459)

Finding of nonobviousness is reinforced by plaintiff's substantial investment in purchas-

ing patent from inventor and in commercially exploiting it, its commercial success, long felt need for patented device and prior failures of those skilled in the art to solve problem, and defendants' failure to find more pertinent prior art than that cited by Patent Office, even after an exhaustive search.

5. Accounting — Increased or treble damages or profits (§11.35)

Costs — Attorney's fees (§25.5)

Infringer's lack of a written opinion of counsel and its continued infringement after notice of infringement do not make case an exceptional one where punitive damages under 35 U.S.C. 284 or attorney's fees under section 285 would be appropriate.

6. Patentability — Anticipation — In general (§51.201)

In order to have anticipation, prior object must be substantially identical to patented device; this occurs when they perform same function in same way and produce same result.

Particular patents—Wheel

3,329,468, Beith, Wheel Structure, claims 1 to 4, 7, 9, 10, 15 to 17, and 19 valid and infringed.

Action by E-T Industries, Inc., against Whittaker Corporation and Des Plaines Grand Automotive Speed Center, Inc., for patent and trademark infringement and unfair competition. Judgment for plaintiff in part and for defendants in part.

IRWIN C. ALTER, PHILLIP A. WEISS, RICHARD E. DICK, ALTER, WEISS, WHITESEL & LAFF, MELVIN E. PEARL, and KATTEN, MUCHIN, GITLES, ZAVIS, PEARL & GALLER, all of Chicago, Ill., for plaintiff.

RICHARD BUSHNELL and OLSON, TREXLER, WOLTERS, BUSHNELL & FOSSE, LTD., both of Chicago, Ill., and DONALD NIST, Los Angeles, Calif., for defendants.

McLAREN, District Judge.

Introduction

This matter arose as an action by E-T Industries, Inc. ("E-T") for infringement of U. S. Letters Patent No. 3,329,468 ("Beith"). The case was tried to the Court without a jury. The Court has examined all of the testimony and exhibits presented, and being fully advised in the premises, finds that the Beith patent is valid and that it is infringed by Ansen Automotive Engineering's ("Ansen") device. The Court further finds that plaintiff has not been guilty of unfair competition and that the defendants Ansen and Des Plaines Grand Automotive Speed Center, Inc. ("Grand") have not committed acts of trademark dilution or unfair competition.

The original complaint in this case, 70 C 2498, was filed by E-T in this district on October 8, 1970. An amended complaint was filed on December 31, 1970. Count 1 of the amended complaint alleges that Ansen and Grand are infringing the Beith patent. Counts 2 and 3 alleged that the defendants committed acts of unfair competition and trademark dilution in connection with E-T's "Unilug" trademark. Plaintiff sought both monetary and injunctive relief.[1] On January 28, 1971, Ansen filed a declaratory judgment action against E-T in the Northern District of California seeking to have the Beith patent declared invalid. It also stated in that action a second claim for relief based upon alleged acts by E-T of unfair competition. E-T denied the allegations in its answer and counterclaimed for patent infringement. That action was subsequently transferred to this district, given docket number 71 C 3133 and was consolidated with 70 C 2498.[2]

The following shall constitute the Court's findings of fact and conclusions of law pursuant to F. R. Civ. P. 52(a).

Findings of Fact

1. The plaintiff herein, E-T Industries, Inc., is a corporation of the State of California, with its principal place of business there, and is a wholly-owned subsidiary of Filter Dynamics International, Inc. (FDI), a corporation of the State of Delaware, having its principal place of business in Ohio.

E-T regularly does business in Illinois. E-T is principally engaged in the manufacture and sale of custom wheels for automobiles.

2. The defendants herein are Des Plaines Grand Automotive Speed Center, Inc., a corporation of the State of Illinois, having its principal place of business in Illinois, and Ansen Automotive Engineering, a corporation of the State of California, having its principal place of business in California, and a wholly owned subsidiary of Whittaker Corporation, with its principal place of business in Califor-

[1] Several amendments to the ad damnum clause have been allowed. E-T now seeks patent infringement damages of $2,810,101 plus interest and costs as compensatory damages as well as treble exemplary damages, through October 28, 1973. This does not limit E-T's ability to recover damages after that date in this suit.

[2] For clarity's sake, E-T will be referred to as plaintiff and Ansen and Grand will be referred to as defendants even though Ansen is the plaintiff in the declaratory judgment action.

nia.[2a] Ansen is engaged in the business of manufacturing and selling a line of specialty speed shop items for automobiles including custom wheels. Grand is a retail speed shop selling a variety of automotive products including custom wheels.

3. On July 4, 1967, U. S. Letters Patent No. 3,329,468 were duly and legally issued to Richard D. Beith. Plaintiff gained title to the patent with the full right to sue for past infringement.

4. On October 29, 1969 plaintiff gave Ansen actual notification of its accusation of infringement and warned that continued manufacture of the accused wheels would be considered a willful and wanton infringement. Defendants continued to manufacture and sell the accused infringing device after being notified. On October 8, 1970 plaintiff brought suit for patent infringement, unfair competition and trademark dilution against Ansen and Grand. Ansen had actual notice of the patent in suit in 1968.

The Patent in Suit

5. Wheels are commonly secured to automobiles by means of a plurality of bolts or lugs projecting from a brake drum or axle flange and cooperating lug nuts. There has been no standardization of the arrangement of such wheel lugs among the different auto makers.

6. The Beith patent teaches a universal wheel system for automobiles having three possible bolt diameter patterns—4-1/2", 4-3/4" and 5"[3]—by providing two different sets of adapters; one set of adapters has centered apertures and the other set of adapters has off-centered apertures. The patent teaches the concept of obtaining three different lug bolt patterns by reorienting one set of the adapters (which has the off-centered holes) to obtain two lug bolt diameters (4-1/2" and 5") and utilizing the set of adapters with centered apertures in substitution for the adapter with the off-centered apertures to obtain the middle position of 4-3/4".

7. Custom wheels for automobiles have been made since at least the early 1960's. Such wheels include cast aluminum or "mag" wheels of various designs, and chrome-plated steel wheels, and are intended to enhance the appearance of the vehicle.

As a general rule, such wheels were expensive and their costs made it prohibitive for a dealer in wheels to inventory a wide variety of such wheels. Also, the prohibitive costs deterred consumers from buying such wheels since they could not use them on more than one type of car. This is especially important since it appears that the typical buyer of these wheels frequently changed automobiles. One of the objectives of the Beith invention was to provide an acceptable universal wheel which incorporates means for accommodating the bolt circles of the three different popular automobiles, i.e., 4-1/2", 4-3/4" and 5".

8. There had been a long existing need for an adaptable wheel. Several unsuccessful attempts to fulfill this need included utilizing adapter plates providing both circularly spaced pre-drilled apertures to fit on lug bolt patterns of a specified diameter and lug bolt patterns arranged in a circle of another standard diameter, such as 5-1/2". This required the manufacturer to supply wheels having apertures suited for fitting onto lug bolts circularly arranged in a circle of 5-1/2" diameter. Rather than stocking three sizes of wheels, three sizes of adapter plates were stocked. Another unsuccessful solution included drilling a plurality of holes in the web of the wheels. The holes were drilled in a manner so that different groups of holes aligned with different lug bolt patterns; adapter plates were used for selecting the holes and reinforcing the web of the wheel. Where this solution used plates it needed different adapter plates for each bolt diameter that the wheel accommodated.

Other solutions included cutting radial or circumferential slots in the wheels to accommodate lug bolts arranged on circles of different radii. The customary way of fulfilling the need was to use adapter plates attached to the wheels.

9. The approach Beith decided to take was opposite to what was considered good engineering practice,[4] because the part of the wheel where the elongated slots were to be formed was structurally the weakest part of the wheel. Much concern had been shown for the strength of wheels in this critical area. His solution to the long-existing problem was an unexpected and unobvious acceptable solution since people with ordinary skill would have sought an acceptable solution by using large adapter plates.

10. Once the invention got out of the preliminary stage, it was a commercial success. Beith's original investment of $750 ultimately led to the $1,375,000 that he received upon selling out to FDI. E-T sales grew to $2,500,000 in 1970 when Beith sold out to FDI and thereafter E-T more than quadrupled its sales to $13,000,000 while the rest of the industry only grew at the rate of 50% per year. The universal system of the Beith wheel was the single most important factor in contributing to this commercial success.

[2a] After trial, the Whittaker Corp. was substituted as a defendant for Ansen. All references to Ansen shall be applicable to Whittaker.

[3] These three diameters are those used on most automobiles.

[4] Cf. U. S. Letters Patent No. 3,006,443 (Siler) at column 1, lines 50-60.

11. FDI, a sophisticated automotive aftermarket manufacturer, recognized the merits of the patented product and bought the patent from Beith. At the time of purchasing the company, new facilities were necessary and further extensive investment had to be made in tooling and other items to enable the true potential of the patented Beith wheel to be fulfilled. Thus, in addition to paying a premium price for the patent, FDI relied on the patent to the extent of their further heavy investment in E-T. This investment to date of trial was about $7,500,000.

The "Fujii" Wheel

12. The alleged activities of Ansen in relation to the defendant Exhibit A-1 wheel (hereinafter also referred to as the "Fujii wheel") do not meet the required evidentiary standards to be considered as invalidating the Beith patent. There was no documentary evidence which confirmed the existence of the Fujii wheel at the time alleged. The oral testimony of Johnson and Fujii, in addition to being uncorroborated by documents, is regarded by the Court as unreliable in view of many inconsistent and impeaching statements made under oath by both of them. The testimony and wheel do not fulfill the defendant's required burden of establishing clear and convincing invalidating evidence.

13. The Court is first concerned with the lack of evidence, other than testimonial, to establish the existence of the A-1 wheel at the time alleged. There were no written records. In addition, there was confusion as to when the wheel was tested.[5] Furthermore, at about the same time Ansen entered into a wheel development program with John T. Ostgaard, resulting in defendants' Exhibits A-34 as well as the plans submitted by Ostgaard. Yet, Ostgaard was never shown, or even told of, the A-1 wheel.

14. Ansen's witnesses may be personally biased in that they were either employees or former employees of Ansen. This tends to lessen their credibility.

15. The A-1 wheel was allegedly put on Fujii's car to test for stress and public reaction. However, no tests were conducted and no reports were made by Fujii, or sought by Ansen, as to the wheel's popularity or its ability to withstand stress. Further, Fujii's demonstration of the wheel consisted at the most of merely showing it to a few of his friends.

16. The adapters in the A-1 wheel were never reversed, nor is there sufficient evidence to establish that such a capability was contemplated. Not only were the washers made so they could not be reoriented but also Johnson admitted that Ansen never tried to reorient the washers until many years later.[6] The wheel was only tried on Fujii's car and not on any automobile with a different bolt diameter and could only fit a 4-3/4" pattern. Finally, only one wheel was made, it was never put up for sale, and it was abandoned for several years until hunted up after this action was commenced.

17. The alleged isolated use of the Fujii wheel was supposedly for testing the wheel for stress and determining the public reaction. In addition to the fact that testing of the alleged wheel was never completed, I find no evidence that could serve as a basis for concluding that the Fujii wheel, if it did exist at the time claimed, was anything other than a concealed or abandoned model that never was publicly disclosed. Accordingly, the Fujii wheel cannot be considered as invalidating prior art.

18. The A-1 wheel even if it did exist at the time alleged by the defendants required modification to accomplish the functions performed by the patent in question. Thus, it was not a reduction to practice, since it was not complete and was not capable of producing the results that are accomplished by the Beith patented wheel.

19. Even after allegedly having the A-1 wheel, the defendants' actions confirmed that such a wheel could not be considered a reduction to practice. Immediately after allegedly developing the A-1 wheel the defendants adopted a rear adapter plate system requiring three plates to obtain a universal wheel. It was not until five years after they allegedly had the A-1 wheel that the defendants began manufacturing the infringing Sprint II wheel.

[1] 20. The alleged isolated use of the Fujii wheel was an abandoned experimental step that was rejected in favor of an unsatisfactory adapter plate type solution by Johnson and as such it did not have any value for teaching those skilled in the art, nor was it a reduction to practice. Also, the subsequent abandonment by Ansen of the experiment confirms that the Beith invention was not obvious to Johnson who is skilled in the art. Therefore,

[5] Ansen's own witnesses testified that the alleged Fujii wheel was tested on a race track shortly before the race track was destroyed and that the race track was destroyed between 1966 and 1967 according to Solly Harris; between 1965 and 1966 according to Samuel Harris; in 1965 according to Tom Finney; and in 1967 according to Alfred H. Butler. Thus, it is quite conceivable that the test took place after Beith's invention. Also, Tom Finney, one of Ansen's employees at the time, testified, by deposition, that he had signed certain documents relating to the A-1 wheel. These were not produced by defendant.

[6] The Court was presented with only one insert for the A-1 wheel. In attempting to orient it, the Court discovered that the insert fit in only two of the five holes and could not be reoriented in one of them. Further, when reoriented, the washer created a 5-1/4" bolt diameter pattern, which fit no American-made car.

the Fujii wheel cannot be used to anticipate under 35 U.S.C. 102 or make a patent invalid for obviousness under 35 U.S.C. 103.

Prior Art

21. The most pertinent patents relied on by the defendants are demonstrative of the scope and content of the prior art. These were the Adair patent (No. 2,590,363, issued in March 1952); the Vachon et al. patent (No. 3,166,357, issued in January 1965); the Martin patent (No. 3,025,109 issued in March 1962); the Hunter patent (No. 3,207,557, issued in September 1965); the Laycock British patent (No. 859,193, issued in January 1961); the Italian patent (No. 579,294, issued in May 1958); and the Crowther patent (No. 1,940,675, issued in December 1933). All of these patents, except Crowther, were cited by the U. S. Patent Office during the prosecution of the Beith patent.

22. The Adair patent discloses a universal emergency wheel having elongated lug bolt apertures in the web. The apertures are radially elongated. Certain of the apertures are enlarged, i.e., the width thereof is much larger than the diameter of the lug bolt so that the lug bolts fit juxtaposed to one side of the apertures. There is no easy way of positively locating and centering the Adair wheel on the hub. Also, there is no adapter utilized or taught by Adair; this is noticeably lacking. Since there is no adapter, there can be no seat region for an adapter. The lug bolt apertures each have a separate chamfer at each end and a separate chamfer in the middle. The chamfers are to match the frusto-conical portion of the lug bolt nuts, but act to bend the lug bolts if the lug bolt nuts are tightened to the required torque. The inventor Adair testified that the sample wheels which were manufactured did not have chamfers. Accordingly, Adair could not possibly have looked on the chamfers shown in the patent as necessary in his wheel for location.

Furthermore, the Adair wheel does not provide a reliable wheel location, since it depends on the visual placement of the bolts on the enlarged opening and the friction created by the nut on the opening for positioning. The tests which defendant ran on the Adair wheel [7] disclosed that the wheel did not have a high level of reliability. Its rate of malfunction also was high. This supports plaintiffs' proposition and the inventor's conception that the wheel was only meant for emergency use and could not be relied upon as a permanent wheel.

23. The Vachon et al. patent also shows a universal wheel. There are two sets of holes drilled in the wheel—one is radially outside of the other so that using one set of holes, the wheel can be mounted on one make of brake drum while the other set of holes makes it mountable on another make of brake drum. The patent states that an annular plate is used to reinforce the wheel hub and also to select the group of holes to be used in mounting the wheel to the hub. It is to be noted that the holes are neither radially elongated nor are there any seats therearound or adapters for fitting into the seats; therefore, the Vachon et al. wheel is basically a different structure.

24. The Martin patent teaches an annular adapter plate that fits between the wheel and the hub for use in mounting wheels having one set of apertures therein to hubs having different lug bolt patterns. The Martin adapter plate uses a series of pivotable lugs to attach the plate to the hub. First, the lugs are mounted directly onto the hub using a hole in each lug to put a screw through it. The lug has another threaded opening; a screw goes through the lug onto a big adapter plate. The plate has five further tap holes on it. These holes match the holes of the wheel. The wheel is mounted to the holes, using a threaded member. This fails to teach enlarged holes, seat regions thereabout, or adapters in the seat regions, and it does not teach anything anticipating or making Beith's invention obvious.

25. The Hunter patent does not teach a universal wheel. It teaches, instead, a system for aligning wheels. The assumption of the Hunter patent is that the lug bolts are not concentric with the wheel bearing. Therefore, the inventor sought to avoid using the lug bolts as a reference point for mounting the wheel. The operation of Hunter first begins when the car is jacked up and a concentric spacer is fitted over the hub. Then, the wheel is rotated to check for runout, and if the wheel is not concentric, the eccentricity is measured. An eccentric washer is put over the hub. The washer is used to diminish the eccentricity on the wheel. Thus, the Hunter patent does not teach lug bolt apertures of a size for receiving therethrough lug bolts in different circle patterns, seats about the lug bolt apertures or adapters fitting in the seat.

26. The Laycock British patent does not relate to the universal wheel or even to a wheel. It relates to a mounting plate for use on wheel balancing machines. The mounting plate can adapt to wheels that are made for any of the well known lug bolt circles. Figure 1 of the Laycock shows that the plates have radially elongated apertures. Slidable inserts are mounted in the apertures. Each of the inserts has a pair of threaded holes, one at the inside and one at the outside of the inserts. The insert is locked into position with a set screw at the center of the insert. There are bolt circles marked on the plate. The inserts are moved to place the inner hole or the outer holes at the desired bolt circle and studs are threaded into the desired holes. The wheels are mounted to

[7] See note 11, infra.

the studs. It must be noted that to adjust the inserts of Laycock requires visual matching of the desired threaded hole of the insert with the marked circles. By comparison, in Beith the adjustment of the lug bolt diameter is automatic and is obtained merely by placing the adapter into the seat around the lug bolt aperture of the wheel.

27. There is nothing in the Italian patent even faintly hinting at a universal wheel concept. The patent is concerned with a lightweight wheel having cooling apertures therein for enabling cooling air to reach the brakes. The lug bolt apertures have hard metallic linings to protect the light metal wheels. With linings in the apertures, there is no possibility of receiving lug bolts arranged in more than one pattern. Thus, there are no lug bolt apertures to receive lug bolts arranged in different circle patterns and no adapters for selecting the desired lug bolt patterns.

[2] 28. The Crowther patent was not cited by the United States Patent Office; however, it is far less important or pertinent than those patents that were cited by the Patent Office. Crowther is not concerned with a universal wheel; rather, it is concerned merely with detachably mounting wheels on hubs. Crowther provides a bolt nut having a convex split collar which cooperates with the concave contour of the seat around the lug bolt aperture to overcome any eccentricity caused by the attachment of the wheel to the hub. Crowther's collar is neither designed to, nor does it perform the function of the Beith adapter. Therefore, it is neither the adapter nor the equivalent of the adapter. Also, Crowther fails to teach lug bolt apertures of a size to accommodate lug bolts arranged in different lug bolt circle patterns. The statutory presumption of validity of the Beith patent is strengthened since the most pertinent prior art relied upon by the defendants consists of patents cited and considered by the Patent Office plus others that were less pertinent than what was considered in the prosecution of the Beith patent in the Patent Office.

30. After studying all of the prior art in the record, in addition to the aforementioned patents, the Court finds that there has been shown no prior art of record that includes any patents or written publications which overcome the statutory presumption of patent validity by clearly and convincingly proving that all the elements of the Beith patent were ever used or taught as claimed in the Beith patent prior to Beith's invention.

[3] 31. Nowhere in the prior art shown is there any prior patent or any combination of prior art patents that would enable one skilled in the art to construct the Beith invention. Further, there is no justification for combining and modifying the patents for anticipation as the defendants assert. The prior art patents do not suggest or teach how they can be combined and modified in one particular way as Beith taught without utilizing the teachings of the Beith patent or without exercising invention. It should also be noted that there was no pattern in the development of the art which led to Beith's invention. In fact, the trend in development was toward the use of adapter plates rather than working with the lug bolt apertures themselves. Thus, even if individually the component parts of Beith were known, they are combined in such a way as to create a synergistic effect.[8]

32. Among the differences between the prior art and the claimed invention is that none of the wheels of the prior art show the combination of elongated lug apertures in a central wheel mounting portion that has rabbeted portions formed around the lug apertures for seating adapters, with the adapters having apertures formed therein that make the wheel universal when adapters are seated in different positions. For example, the adapters of Claims 1, 2, 3, 4, 7, 9 and 10 are, among other things, defined as being capable of being seated in at least two orientations with the apertures and the adapters defining a lug bolt circle of selected radii in each of the two orientations.

33. Among the differences between the prior art and the claimed invention is that none of the prior art references taught or made obvious a non-circular adapter and seat system in the central mounting portion of a wheel whereby the adapters can be seated to produce a universal wheel by selecting different ones of a plurality of possible lug bolt circle patterns with the apertures of the adapters. (See Claims 3, 10, 15, 16, 17 and 19.) Where the adapter system described in the patent is circular, the adapters must be aligned by eye and they move while installing the wheel. When the adapters and seats are non-circular and they are fitted together, they automatically and positively locate the wheel for installation and mounting for each of the desired multiple lug bolt circle patterns.

34. The level of ordinary skill in the automotive wheel field is such that those skilled in the art would not have gone in the direction that Beith went at the time of his invention.[9] Beith removed material from what is considered a critical portion of the wheel—the central mounting portion or web near the central hub opening. Thus, Beith went in a direction opposite to the direction that was being taken

[8] See Blaw-Knox Co. v. I. D. Lain Co., 230 F.2d 373, 108 USPQ 356 (7th Cir. 1956).

[9] This is brought home by the fact that Ansen rejected the idea of elongated apertures and opted for a plate system at around the same time as Beith was developing his wheel.

by those having ordinary skill in the art. By doing so, the public was provided with a universal wheel that was smart looking, in that the elongated slots were directly in the web of the wheel itself and small adapter means were used to obtain universality. Such wheels could be manufactured and operated easily while still having a pleasing appearance as well as reliably locating and attaching the wheel to the brake drum.

[4] 35. This Court finds that the patented wheel disclosed in the Beith patent in suit is a basic invention which is not anticipated by any of the prior art cited by defendants. In addition, as required by 35 U.S.C. 103, this Court has given full and careful consideration to the scope and content of the prior art, with respect to universal wheels, and therefore, to the differences between the prior art and the claimed subject matter of the patent, and to the level of ordinary skill in the art, with emphasis on the actual performance of men of at least ordinary skill. Against this background, the Court finds that the claimed subject matter would not have been obvious to a man of ordinary skill in the art at the time the invention was made, in view of the prior art asserted by defendants, taken either singly or in combination. Moreover, the finding by this Court of non-obviousness is reinforced by the objective evidence of patentability present in this case, including the recognition of great merit paid to the invention by Filter Dynamics International, Inc. as shown by their investment in the patent, and by the commercial success of the patented invention, the long-felt need for an acceptable universal wheel, the prior failures on the part of workers (such as Johnson) of at least ordinary skill in the art, and failure on the part of the defendants to find more pertinent prior art than that which was cited in the United States Patent Office, even after an exhaustive search for such prior art.

Infringement

36. The defendants Ansen and Grand infringed and are infringing the Beith patent by manufacuturing and/or selling the Ansen Sprint II wheel. The Sprint II infringes Claims 1, 2, 3, 4, 7, 9, 10, 15, 16, 17 and 19 of Beith.

37. Ansen's front washers and the rear inserts respond to the term washers as used in some of the claims of the Beith patent.[10] Therefore, the Sprint II wheel responds to the Beith claims regardless of whether such response is attributed to the front washers or the rear inserts, or both used as a set, since they perform both a locating and clamping function. Despite the fact that the front washers of the Sprint II are circular, rather than oval-shaped, the offset washer can be used only in two positions. Any attempt to utilize them in a position other than the 4-1/2" or 5" diameter creates a situation in which the lug nut cannot engage the lug bolt, because the wheel blocks the opening. Thus, the front washer does provide a positive locating function, when combined with the non-circular aperture.

Defendant's contention that the wheel with the 4-3/4" diameter (or centrally drilled) inserts does not infringe is without merit in that the wheel is adaptable for use on automobiles with varying radii and the adapters are sold as sets to accomplish universality.

38. This Court finds that the Ansen Sprint II wheels have adapter means that are snugly seated in the seat regions about the lug apertures. This finding is supported by tests of the expert Walter Nass made on a randomly sampled group of Ansen Sprint II wheels. The tests confirmed the snug dimensional relationship of the washers and inserts with their respective seats. Whether used alone or together, the washers or inserts more than meet the requirements of concentricity and runout as established by the industry. Therefore, the Sprint II wheel responds to the Beith claims regardless of whether such response is attributed to the front or the rear of the wheel.

39. Both the washers and the rear inserts of the Sprint II wheel are in covering relation with the lug apertures. Therefore, the Sprint II wheel responds to the Beith claims regardless of whether such response is attributed to the front washers or the rear inserts.

40. The Sprint II wheel copies and infringes the Beith patent not only in its means for providing universality, but also copies nonfunctional features, such as the style and appearance of the E-T deep-dish, highly polished, die cast, universal wheel.

41. Defendants have actively induced others to infringe plaintiff's patent by: (a) selling the accused wheels with specific instructions on how to install same to form the infringing combination; (b) advertising and otherwise promoting the use of the accused wheels in the infringing combination; and (c) assisting, encouraging and abetting others in the resale of the accused wheels. Ansen's and Grand's acts of distributing the advertising instructions on how to use the adapter kits with the Sprint II wheel are acts of inducing the infringement of the Beith patent.

42. Ansen has sold to Grand, a distributor for Ansen, about $100,000 worth of wheels. Grand was a distributor of Ansen when the suit was filed and is still a distributor of Ansen

[10] The fact that the rear insert is thicker than the E-T insert is only a matter of construction and does not go to the function or purpose to which the washer is used. It operates the same way and has the same shape as the E-T washer and can be deemed a "washer" for purposes of this case.

and, therefore, continues to infringe and induce the infringement of the Beith patent.

[5] 43. The Court does not believe that defendant's lack of a written opinion of counsel, continued manufacture of the wheels after notice of infringement, or any other facts herein, make this an exceptional case where punitive damages under 35 U.S.C. § 284 or attorney's fees under 35 U.S.C. 285 would be appropriate."

Ansen's Unfair Competition Claim

44. No evidence was introduced in support of Ansen's claim of unfair competition against E-T.

E-T's Claim of Unfair Competition and Trademark Dilution

45. The sole evidence with respect to these claims consisted of the testimony of Denise Blasingame, an employee of E-T's counsel. She testified that her employer sent her to Grand to purchase a set of Ansen wheels. During the course of her transaction, an employee of Grand, "Ken," told her that the product was a "Unilug." However, he did not say it was an E-T wheel and she was aware it was an Ansen wheel. Ken is no longer employed by Grand. The Court does not believe that this one isolated incident, if it in fact occurred as described, is sufficient evidence to warrant injunctive or monetary relief for unfair competition and trademark dilution.

Conclusions of Law

1. The Court has jurisdiction over the parties and over the subject matter of this suit.

2. Venue is proper in this district.

3. The plaintiff, E-T Industries, Inc., is the owner of United States Letters Patent No. 3,329,468 and all rights thereunder, including the rights to sue and to recover for past infringement.

4. Plaintiff, E-T Industries, Inc., has maintained its burden of proving by a preponderance of evidence that the defendants infringed U. S. Patent No. 3,329,468. Defendants Ansen and Grand have not maintained the burden of clearly and convincingly overcoming the presumption of validity and proving the invalidity of the patent, as required by Title 35 U.S.C. § 282; nor have Ansen and Grand proven that they avoid infringement of U. S. Patent No. 3,329,468. See Reese v. Elkhart Welding & Boiler Works, Inc., 447 F.2d 517, 526, 171 USPQ 129, 135-136 (7th Cir. 1971).

5. Defendant sought to invalidate the Beith patent on the grounds that Ansen's "Fujii" wheel constituted prior art in the public sphere as contemplated in 35 U.S.C. § 102(a). This contention is rejected for several reasons. First, Ansen did not sufficiently establish that the A-1 wheel, assuming arguendo that it was anticipatory, was in the public domain one year prior to the date of Beith's invention. This is highlighted by the conflicting testimony of Ansen's employees as to dates and exactly what was done to the wheel. Also, the lack of documentation and the casual manner in which the wheel was handled detract from the testimony's credibility and weight.

Second, the Court believes that Ansen's use of the A-1 wheel, assuming its existence at the time claimed, was merely an abandoned experiment. No records were kept or formal tests made. The wheel was out of Ansen's control for several years and was kept in a storage room. It was not shown to Ostergaard, who was aiding Ansen in its wheel development program. Ansen never pursued the manufacture of the wheel nor did it sell or attempt to sell even one wheel, and in fact abandoned it in favor of other types of wheels. See, e.g., Illinois Tool Works, Inc. v. Continental Can Co., 273 F.Supp. 94, 154 USPQ 401 (N.D. Ill. 1967), aff'd, 397 F.2d 517, 158 USPQ 437 (7th Cir. 1968).

[6] Third, the Court believes that the evidence is not sufficient to show that the Fujii wheel "anticipated" Beith's invention. In order to have anticipation, it is necessary that the prior object be "substantially identical" to the patented device. This occurs when they perform the same function in the same way and produce the same result. Id. at 105, 154 USPQ at 410-411. In the instant case, no attempt was made to perform the function of universality of the wheel, nor is the evidence sufficient to show that this could be done. This being so, the Ansen wheel cannot be deemed to be anticipatory under § 102.

6. The Court, after examining the entire record, finds that the E-T wheel was not obvious in light of the prior art under the tests enunciated in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966).

7. U. S. Letters Patent 3,329,468 entitled "Wheel Structure" as to Claims 1, 2, 3, 4, 7, 9, 10, 15, 16, 17 and 19 is in all respects valid and subsisting in law.

8. U. S. Letters Patent 3,329,468 as to Claims 1, 2, 3, 4, 7, 9, 10, 15, 16, 17 and 19 is

[11] While the Court does not believe that attorneys' fees are appropriate in this case, mention should be made of certain activities of Ansen and its counsel. First, defendant at trial introduced evidence of certain tests conducted on the Adair wheels. Plaintiff's counsel was not given notice of these tests. The Court believes that this was contrary to the understanding reached with the Court that all tests would be done under joint auspices. At trial, defendant attempted to use wheel drums other than those previously agreed to. Defendant has attempted to introduce evidence that the Ansen wheel had been patented, despite the fact that this had not been divulged to plaintiff.

infringed by the defendants by their manufacture and sale of the accused wheels.

9. Defendants have infringed the U. S. Letters Patent 3,329,468 as to Claims 1, 2, 3, 4, 7, 9, 10, 15, 16, 17 and 19.

10. Plaintiff is entitled to an injunction restraining defendants against further infringement of U. S. Letters Patent 3,329,468 as to Claims 1, 2, 3, 4, 7, 9, 10, 15, 16, 17 and 19.

11. The Court believes that further evidence should be taken on the issues of damages. This evidence should include the terms of the license agreement proposed by E-T and rejected by Ansen, the profits Ansen made on the wheels it sold, and further evidence as to E-T's lost sales, with particular emphasis on the profitability factors E-T used in determining its lost profits. Also an accounting will be made to determine damages to date. After further evidence is taken, the Court will better be able to evaluate the measure of damages it should use.

12. The Court holds that this is not an exceptional case requiring punitive damages under 35 U.S.C. § 284 or attorneys' fees under 35 U.S.C. § 285.

13. E-T's claims for trademark dilution and unfair competition are not supported by the evidence and must be and hereby are dismissed. Each party shall bear its own costs on these counts.

14. Ansen's claim of unfair competition against E-T is dismissed. No evidence at all was introduced to support this count. Costs will be awarded to E-T.

15. Any finding of fact entered herein which may be construed in whole or in part as a conclusion of law shall be so deemed and treated as if set forth as a conclusion of law herein and any conclusion of law entered herein which may be construed in whole or in part as a finding of fact shall be so deemed and treated.

United States Court of Appeals

For the Seventh Circuit

Chicago, Illinois 60604

March 4, 1976

Before

Hon. JOHN PAUL STEVENS, Circuit Justice*

Hon. LATHAM CASTLE, Sr. Circuit Judge

Hon. LUTHER M. SWYGERT, Circuit Judge

E-T INDUSTRIES, INC.,
Plaintiff-Defendant-Appellee,

No. 74-1924 vs.

WHITTAKER CORP. and DES PLAINES GRAND AUTOMOTIVE SPEED CENTER, INC.,
Defendants-Plaintiffs-Appellants.

Appeal from the United States District Court for the Northern District of Illinois, Eastern Divsr.

(70 C 2498 & 71 C 3133)

On consideration of the petition for rehearing en banc filed in the above-entitled cause, no judge in active service having requested a vote thereon, nor any judge having voted to grant the petition, and all of the members of the panel having voted to deny a rehearing,

IT IS ORDERED that the petition for rehearing en banc in the above-entitled cause be, and the same is hereby, DENIED.

*Mr. Justice Stevens participated initially as Circuit Judge, and on and after December 19, 1975 as Circuit Justice.

FPI:81—6-7-73-FSW 684

Supreme Court of the United States

Sakraida v. Ag Pro, Inc.

No. 75-110 Decided Apr. 20, 1976

PATENTS

1. Patentability — Invention — In general (§51.501)

Constitution requires that there be some "invention" to be entitled to patent protection; there is absence of that degree of skill and ingenuity that constitutes essential elements of every invention unless more skill and ingenuity were required than were possessed by ordinary mechanic acquainted with business.

2. Patentability — Invention — Law or fact question (§51.507)

Ultimate test of patent validity is one of law, but resolution of obviousness issue necessarily entails basic factual inquiries.

3. Patentability — Aggregation or combination — Of old elements (§51.159)

Courts should scrutinize patent claims for combinations of old elements with care proportioned to difficulty and improbability of finding invention in assembly of old elements; patent for combination that only unites old elements with no change in their respective functions withdraws what is already known into field of its monopoly and diminishes resources available to skillful men.

4. Patentability — Aggregation or combination — Of old elements (§51.159)

Patentability — Aggregation or combination — Specific cases (§51.163)

Combination of old elements that produces abrupt release of water directly from storage tanks or pools to sloping barn floor to wash away animal wastes is not synergistic, that is, resulting in effect greater than sum of several effects taken separately; arrangement of old elements with each performing same function it had been known to perform, although perhaps producing more striking result than in previous combinations, is not patentable: assembly of old elements that delivers water directly rather than through pipes or hoses to barn floor is work of skillful mechanic, not inventor; exploiting principle of gravity adds nothing to sum of useful knowledge where there is no change in respective functions of combination's elements.

5. Patentability — Aggregation or combination — Of old elements (§51.159)

Patentability — Evidence of — Commercial success — In general (§51.4551)

Patentability — Evidence of — Economy, efficiency and simplicity (§51.461)

Desirable benefits of combination of old elements, which was great convenience, produced desired result in cheaper and faster way and enjoyed commercial success, but that did not produce new or different function within validity test for combination patents, do not make patentability, without invention.

Particular patents — Dairy Establishment

3,223,070, Gribble and Bennett, Dairy Establishment, claims 1 and 3 invalid.

On writ of certiorari to Court of Appeals for the Fifth Circuit; 185 USPQ 642.

Action by Ag Pro, Inc., against Bernard A. Sakraida for patent infringement. On writ of certiorari to review judgment for plaintiff. Reversed.

See also 168 USPQ 481, 177 USPQ 106, 179 USPQ 385, 187 USPQ 480.

James F. Hulse and Stephen B. Tatem, Jr., both of El Paso, Tex., and R. Douglas Lyon, and Lyon & Lyon, both of Los Angeles, Calif. (Scott, Hulse, Marshall & Feuille, El Paso, Tex., of counsel) for petitioner.

J. Pierre Kolisch, Portland, Ore. (John W. Stuart, Portland, Ore., of counsel) for respondent.

Helen W. Nies, Donald R. Dunner, Herbert H. Mintz, and David N. Webster, all of Washington, D.C., for The Bar Association of the District of Columbia, amicus curiae.

Mary Helen Sears, and Irons & Sears, both of Washington, D.C., for The Texas Farmers Union, amicus curiae.

Mr. Justice Brennan delivered the opinion of the Court.

Respondent Ag Pro, Inc., filed this action against petitioner Sakraida on October 8, 1968, in the District Court for the Western District of Texas for infringement of United States Letters Patent 3,223,070, entitled "Dairy Establishment," covering a water

flush system to remove cow manure from the floor of a dairy barn. The patent was issued December 14, 1965, to Gribble and Bennett, who later assigned it to respondent.

The District Court's initial grant of summary judgment for petitioner was reversed by the Court of Appeals for the Fifth Circuit. 437 F.2d 99, 168 USPQ 481 (1971). After a trial on remand, the District Court again entered a judgment for petitioner. The District Court held that the patent "does not constitute invention, is not patentable, and is not a valid patent, it being a combination patent, all of the elements of which are old in the dairy business, long prior to 1963, and the combination of them as described in the said patent being neither new nor meeting the test of non-obviousness." The Court of Appeals again reversed and held the patent valid. 474 F.2d 167, 177 USPQ 106 (1973). On rehearing, the court remanded "with directions to enter a judgment holding the patent valid, subject, however, to * * * consideration of a motion under Fed. Rule Civ. Proc. 60(b)(2), to be filed in the District Court by the [petitioner] Sakraida on the issue of patent validity based on newly discovered evidence." 481 F.2d 668, 669, 179 USPQ 385, 386 (1973). The District Court granted the motion and ordered a new trial. The Court of Appeals again reversed, holding that the grant of the motion was error, because "the record on the motion establishes that [petitioner] failed to exercise due diligence to discover the new evidence prior to entry of the former judgment." 512 F.2d 141, 142, 185 USPQ 642, 643 (1975). The Court of Appeals further held that "[o]ur prior determination of patent validity is reaffirmed." Id., at 144, 185 USPQ at 644. We granted certiorari, 423 U.S. 891, 187 USPQ 480 (1975). We hold that the Court of Appeals erred in holding the patent valid and also in reaffirming its determination of patent validity. We therefore reverse and direct the reinstatement of the District Court's judgment for petitioner, and thus we have no occasion to decide whether the Court of Appeals properly found that petitioner had not established a case for a new trial under Rule 60(b)(2).

Systems using water to clean animal wastes from barn floors have been familiar on dairy farms since ancient times.[1] The District Court found, and respondent concedes, that none of the 13 elements of the Dairy Establishment combination is new,[2]

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[1] Among the labors of Hercules is the following:

"Hercules was next sent to Augeas King of Elis, who had immense droves of cattle. The stables usually occupied by these animals were in an incredibly filthy state, as they had not been cleaned in years; and now Hercules was given the task to remove the accumulated filth, and make a complete purification of the premises.

"Close by these stables rushed a torrent, or rather a river, the Alpheus. Hercules, with one glance, saw the use he could make of this rushing stream, which he dammed and turned aside from its course, so that the waters passed directly through the stables, carrying away all impurities, and finally washing them perfectly clean." Guerber, Myths of Greece and Rome 221 (1893).

[2] The District Court found as follows reflecting Claims 1 and 3, the only claims involved in the case:

"1. I find that the 'dairy establishment' as described in United States Letters Patent 3,233,070 is composed of 13 separate items, as follows:

"(a) '* * * a smooth, evenly contoured, paved surface forming a floor providing a walking surface * * *.'

"(b) '* * * drain means for draining wash water from such floor opening to the top of the floor.'

"(c) '* * * said smooth, evenly contoured surface which forms such floor sloping toward said drain * * *.'

"(d) '* * * multiple rest areas with individual stalls for each cow and with each of said stalls having a bottom which is also a smooth pavement * * *.'

"(e) '* * * which is disposed at an elevation above the paved surface forming the floor * * *.'

"(f) '* * * said stalls being dimensioned so that a cow can comfortably stand or lie in the stall, but offal from the cow falls outside the stall bottom and onto the floor providing the walking surface in the barn * * *.'

"(g) '* * * said barn further including defined feeding areas having feeding troughs * * *.'

"(h) '* * * a cow-holding area.'

"(i) '* * * a milking area.'

"(j) '* * * a transfer area all bottomed with the walking surface forming said floor in the barn * * *.'

"(k) '* * * and floor washing means for washing the floor providing the walking surface in the barn where said floor bottom, said feeding, holding, milking and transfer areas operable to send wash water flowing over the floor with such water washing any cow offal thereon into the said drain means, said floor washing means including means located over a region of said floor which is uphill from said drain means constructed to collect water as a pool above said floor and operable after such collection of water as a pool to dispense the water as a sheet of water over said floor.'

"(l) A tank on a mounting, so that it can be tilted, and the water poured out to cascade on the floor to form a sheet.

"(m) A floor-washing means comprising a dam for damming or collecting water as a pool directly on the floor, which such dam abruptly

and many of those elements, including storage of the water in tanks or pools, appear in at least six prior patented systems.[3] The prior art involved spot delivery of water from tanks or pools to the barn floor by means of high pressure hoses or pipes. That system required supplemental hand labor, using tractor blades, shovels, and brooms, and cleaning by these methods took several hours. The only claimed inventive feature of the Dairy Establishment combination of old elements is the provision for abrupt release of the water from the tanks or pools directly onto the barn floor, which causes the flow of a sheet of water that washes all animal waste into drains within minutes and requires no supplemental hand labor. As an expert witness for respondent testified concerning the effect of Dairy Establishment's combination, "water at the bottom has more friction than this water at the top and it keeps moving ahead and as this water keeps moving ahead we get a rolling action of this water which produced the cleaning action * * *. You do not get this in a hose * * *. [U]nless that water is continuously directed toward the cleaning area the cleaning action almost ceases instantaneously * * * "[4]

The District Court found that "[n]either the tank which holds the water, nor the means of releasing the water quickly is new, but embraces tanks and doors which have long been known," and further that "their use in this connection is one that is obvious, and the patent in that respect is lacking in novelty. The patent does not meet the non-obvious requirements of the law." The District Court therefore held that Dairy Establishment "may be relevant to commercial success, but not to invention," because the combination "was reasonably obvious to one with ordinary skill in the art." Moreover, even if the combination filled a "long-felt want and * * * has enjoyed commercial success, those matters, without invention, will not make patentability." Finally, the District Court concluded "that to those skilled in the art, the use of the old elements in combination was not an invention by the obvious-nonobvious standard. Even though the dairy barn in question attains the posture of a successful venture, more than that is needed for invention."[5] The Court of Appeals disagreed with the District Court's conclusion on the crucial issue of obviousness.

[1] It has long been clear that the Constitution requires that there be some "invention" to be entitled to patent protection. Dann v. Johnston, U.S. , 189 USPQ 257 (1976). As we explained in Hotchkiss v. Greenwood, 11 How. 248, 267 (1851): "[U]nless more ingenuity and skill * * * were required * * * than were possessed by an ordinary mechanic acquainted with the business, there was an absence of that degree of skill and ingenuity which constitute essential elements of every

[3] openable to send water cascading as a sheet over the floor towards the drain.

"2. I further find that each of the items above-described were not new, but had been used in the dairy business prior to the time the application for the said Gribble patent, made the subject of this action, had been filed in the Patent Office of the United States on November 5, 1963."

The District Court found "that many of the items going to make up Plaintiff's claim for a patent were disclosed in prior patents, known respectively as the McCornack patent, the Holz patent, the Ingraham patent, the Kreutzer patent, the Bogert patent, and the Luks patent; and that the statements of the Examiner's opinions refusing to issue a patent are true as all items there stated to be covered in prior patents or publications."

[4] This witness testified that

"water has energy and it can be used in many different ways. In a hose the energy is used by impact, under pressure, external force that is applied to this pressure — to this water, whereas the water that comes down as a sheet or wall of water has built in energy because of its elevation and as this water is released it does the same thing water does in a flooded stream. As this water — I will try to make this clear, and I hope I can, on the surface of this pavement there are these piles of manure droppings. This pavement is smooth and this water moves down over this manure. The water at the bottom has more friction than this water on the top and it keeps moving ahead and as this water keeps moving ahead we get a rolling action of this water which produced the cleaning action. That is the key to this method of cleaning. You do not get this in a hose. You do not get it in a gutter as has been used in the past. I might just mention a little bit about the hose. This squirting water on a floor — probably have done it on our own sidewalks or walkways, and I just mention that, that unless that water is continuously directed towards the cleaning area the cleaning action almost ceases instantaneously. Now the movie that was shown earlier very dramatically illustrated that point. The cleaning action — as soon as the hoses moved to one side the cleaning action ceased here and that is why this hose was moved back and forth, to drive this stuff on down to where we want it."

[5] The court also "conclude[d] that while the combination of old elements may have performed a useful function, it added nothing to the nature and quality of dairy barns theretofore used."

invention. In other words, the improvement is the work of the skillful mechanic, not that of the inventor." This standard was enacted in 1952 by Congress in 35 U.S.C. §103 "as a codification of judicial precedents * * * with Congressional directions that inquiries into the obviousness of the subject matter sought to be patented are a prerequisite to patentability." Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 466 (1966). Section 103 provides:

> "A patent may not be obtained though the invention is not identically disclosed or described, as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made."

[2] The ultimate test of patent validity is one of law. A&P Tea Co. v. Supermarket Corp., 340 U.S. 147, 155, 87 USPQ 303, 307 (1950), but resolution of the obviousness issue necessarily entails several basic factual inquiries. Graham v. John Deere Co., supra, at 17, 148 USPQ at 466-467.

> "Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved." Ibid.

The Court of Appeals concluded that "the facts presented at trial clearly do not support [the District Court's] finding of obviousness under the three-pronged Graham test * * *." 474 F.2d, at 172, 177 USPQ at 110. We disagree and hold that the Court of Appeals erroneously set aside the District Court's findings.

[3] The scope of the prior art was shown by prior patents, prior art publications, affidavits of people having knowledge of prior flush systems analogous to respondent's, and the testimony of a dairy operator with 22 years' experience who described flush systems he had seen on visits to dairy farms throughout the country. Our independent examination of that evidence persuades us of its sufficiency to support the District Court's finding "as a fact that each and all of the component parts of this patent * * * were old and well-known throughout the dairy industry long prior to the date of the filing of the application for the Gribble patent * * * [w]hat Mr. Gribble referred to * * * as the essence of the patent, to wit, the manure flush system, was old, various means for flushing manure from dairy barns having been used long before the filing of the application * * *."[4] Indeed, respondent admitted at trial "that the patent is made up of a combination of old elements" and "that all elements are individually old * * *." Accordingly, the District Court properly followed our admonition in A&P Tea Co. v. Supermarket Corp., supra, at 152, 87 USPQ at 305-306: "Courts should scrutinize combination patent claims with a care proportioned to the difficulty and improbability of finding invention in an assembly of old elements * * *. A patent for a combination which only unites old elements with no change in their respective functions * * * obviously withdraws what already is known into the field of its monopoly and diminishes the resources available to skillful men * * *."

The Court of Appeals recognized that the patent combined old elements for applying water to a conventional sloped floor in a dairy barn equipped with drains at the bottom of the slope and that the purpose of the storage tank — to accumulate a large volume of water capable of being released in a cascade or surge — was equally conventional. 474 F.2d, at 169, 177 USPQ at 108. It concluded, however, that the element lacking in the prior art was any evidence of an arrangement of the old elements to effect the abrupt release of a flow of water to wash animal wastes from the floor of a dairy barn. Ibid. Therefore, "although the [respondent's] flush system does not embrace a complicated technical improvement, it does achieve a synergistic result through a novel combination." Id., at 173, 177 USPQ at 111.

[4] We cannot agree that the combination of these old elements to produce an

[4] The court stated:

"I therefore find as a fact that each and all of the component parts of this patent as listed under the applicant's claims set out in said patent, were old and well-known throughout the dairy industry long prior to the date of the filing of the application for the Gribble patent. I further find that what Mr. Gribble referred to in his deposition as the essence of the patent, to wit, the manure flush system, was old, various means for flushing manure from the dairy barns having been used long before the filing of the application for the Gribble patent, the general idea in that connection being a hard surfaced sloping floor onto which the cows' offal was dropped, and some system of introducing water in sufficient quantities and force onto said floor to wash the offal therefrom, with a ditch or drain to carry the offal so washed away from the barn, either into a manure container or otherwise."

abrupt release of water directly on the barn floor from storage tanks or pools can properly be characterized as synergistic, that is, "result[ing] in an effect greater than the sum of the several effects taken separately." Anderson's-Black Rock v. Pavement Co., 396 U.S. 57, 61, 163 USPQ 673, 674 (1960). Rather, this patent simply arranges old elements with each performing the same function it had been known to perform, although perhaps producing a more striking result than in previous combinations. Such combinations are not patentable under standards appropriate for a combination patent. A&P Tea Co. v. Supermarket, Equipment Corp., supra; Anderson's-Black Rock v. Pavement Co., supra. Under those authorities this assembly of old elements that delivers water directly rather than through pipes or hoses to the barn floor falls under the head of "the work of the skillful mechanic, not that of the inventor." Hotchkiss v. Greenwood, supra, at 267. Exploitation of the principle of gravity adds nothing to the sum of useful knowledge where there is no change in the respective functions of the elements of the combination; this particular use of the assembly of old elements would be obvious to any person skilled in the art of mechanical application. See Dann v. Johnston, slip op., at 11, 189 USPQ at 261-262.

[5] Though doubtless a matter of great convenience, producing a desired result in a cheaper and faster way, and enjoying commercial success, Dairy Establishment "did not produce a 'new or different function' * * * within the test of validity of combination patents." Anderson's-Black Rock v. Pavement Co., supra, at 60, 163 USPQ at 674. These desirable benefits "without invention will not make patentability." A&P Tea Co. v. Supermarket, Equipment Corp., supra, at 153, 87 USPQ at 306. See Dann v. Johnston, supra, at — n.4, 189 USPQ at 261.

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Court of Appeals, Second Circuit

The Robert Stigwood Group Limited, et al.
v. O'Reilly, et al.
Track Music, Inc., et al.
v. Contemporary Mission, Inc., et al.

Nos. 75-7076, 75-7077 and 75-7091
Decided Jan. 19, 1976

COPYRIGHTS

1. Accounting — Damages — Copyrights (§11.253)

Infringement — In general (§24.201)

Federal district court erred in taking "baseline figure of 50" as number of unauthorized performances of copyrighted work simply because figure had been conceded by accused infringers.

2. Infringement — In general (§24.201)

Rights embraced in copyright (§24.50)

Ephemeral public performance on stage is not like film negative that can be reproduced; Section 1(d) provides that exclusive right to make "any transcription or record" belongs to copyright owner.

3. Infringement — In general (§24.201)

17 U.S.C. 101(e) makes unauthorized manufacture of tape recordings containing renditions of copyrighted musical compositions infringement of musical copyright.

4. Accounting — Damages — Copyrights (§11.253)

Infringement — In general (§24.201)

Only when type of copyright infringement permits further reproduction abroad is exploitation abroad subject of constructive trust; federal district court properly excluded unauthorized Canadian performances of copyrighted works in assessing damages, since copyright laws do not have extraterritorial operation.

5. Accounting — Damages — Copyrights (§11.253)

There are three ways of getting damages for copyright infringement under 17 U.S.C. 101: (1) actual damages to copyright proprietor, (2) profits that infringer has made from such infringement, or (3) in lieu of actual damages and profits, damages as appear to court to be just, which shall not exceed $5,000 nor be less than $250 and shall not be regarded as penalty.